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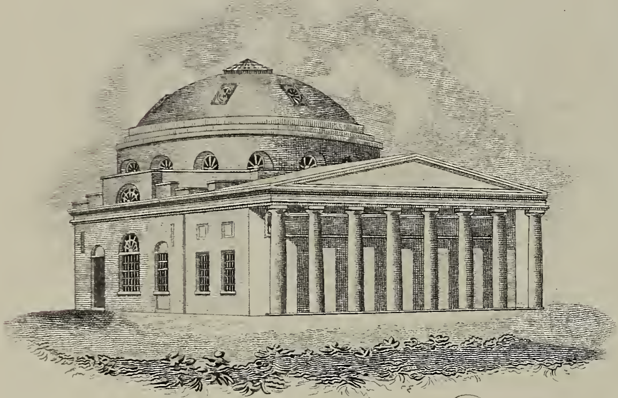

University of Maryland

The OHIO STATE MEDICAL JOURNAL

JANUARY, 1941
Vol. 37 Number 1

HEADQUARTERS FOR 1941 ANNUAL MEETING

Where Ohio physicians will rally during the week of June 2 when annual session of the American Medical Association will be held in Cleveland and House of Delegates of the Ohio State Medical Association will convene.

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The Ohio State Medical Journal

Vol. 37 January, 1941 No. 1

Published monthly by The Ohio State Medical Association, 79 East State Street, Columbus, Ohio. Subscription, $3.00 per year to non-members: Single Copy, 30 cents.

Entered as second class matter July 5, 1905, at the Postoffice at Columbus, Ohio, under act of Congress of March 3, 1879; Acceptance for mailing at special rate of postage provided for in Section 1103. Act of Oct. 3, 1917. Authority July 10, 1918.

The Journal does not assume responsibility for opinions expressed by the essayists. Advertising must conform to standards and regulations established by the American Medical Association.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 January, 1941 No. 1

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Analysis of Fatal Vehicle Accidents in Cuyahoga County For a Period of Three Years

S. R. GERBER, M.D.*

DURING the years of 1937, 1938 and 1939, 806 cases of human fatality due directly or indirectly to vehicular accidents were seen at the Cuyahoga County Morgue. Inasmuch as fatalities resulting from vehicular accidents, with the exception of "Acts of God," are useless and unnecessary deaths, and because of the vast interest in traffic accidents throughout the country stimulated by the National Safety Council, I have tried to analyze the data associated with these vehicular deaths in order that through some constructive conclusions similar deaths in the future may be avoided or their number materially decreased.

Of the 806 cases that comprise the study, 625 of 77.5 per cent were males and 181 or 32.5 per cent were females. Chart No. 1 shows the distribution of vehicular fatalities in the various age groups. In this series, the youngest victim was six months old and the oldest victim was 91 years of age. The greatest number of cases occurred in the age group between 50 and 54 years. Twenty-five or 3.1 per cent of the cases occurred in children of pre-school age. Seventy-six or 9.4 per cent of the cases were among children of grammar school age. It is significant to note that the highest incidence of these fatal accidents involving children occurred on Fridays and Saturdays and in the late afternoon and evening, periods when these children are not offered the protection of the school system. A few cases occurred during the period of going to and from school.

The Author

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In Chart No. 2 is recorded the distribution of these vehicular fatalities according to the time of the day the accident occurred. From this, it can be seen that the highest incidence of fatalities occurred between the hours of 8 and 9 in the evening. In the eight-hour period from 6 P.M. to 2 A.M., 443 or 55 per cent of the total number of fatalities occurred. From Chart No. 3, it can be seen that the greatest number of accidents occurred during the week-end and including Friday, Saturday and Sunday. During this period,

TABLE No. 1

Distribution of the Vehicular Fatalities According to the Type of Accident

	Number of Cases Adults	Number of Cases Children
Collision of Two Automobiles	83	5
Collision of Automobile and Pedestrian	395	54
Collision of Truck and Pedestrian	35	14
Collision of Street Car and Pedestrian	8	3
Collision of Automobile and Truck	23	0
Collision of Automobile and Bicycle	0	9
Collision of Automobile and Train	22	4
Collision of Automobile and Street Car	18	1
Collision of Automobile and Safety Zone	25	0
Others	95	12
Total	704	102

---

*Coroner's Office of Cuyahoga County Morgue.

there occurred 467 or 58 per cent of the total 806 fatalities. From Chart No. 4, it can be seen that, except for a slight increase during the fall months, there is no marked fluctuation in the number of fatalities from month to month.

In Table No. 1 can be seen the type of accident that caused these vehicular fatalities. The most common accident is the type where the automobile strikes a pedestrian. This accounts for 55.7 per cent of all the fatalities. In considering all the pedestrian victims, the total is 581 or 72 per cent. The other types of accidents account for a relatively small percentage of the total fatalities individually, but their total number is significant (357 fatalities or 44.3 per cent).

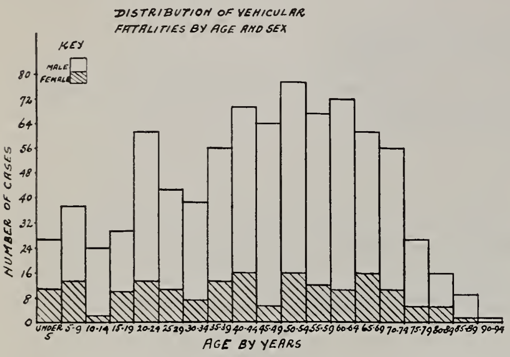

CHART 1

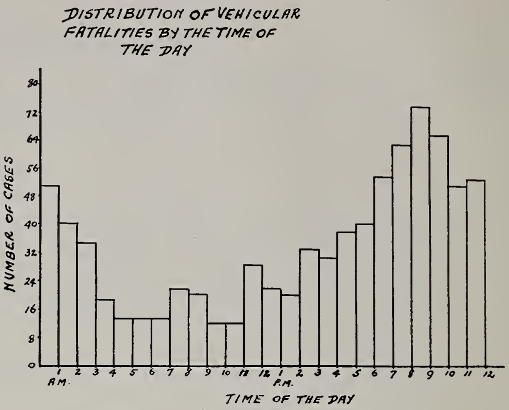

CHART 2

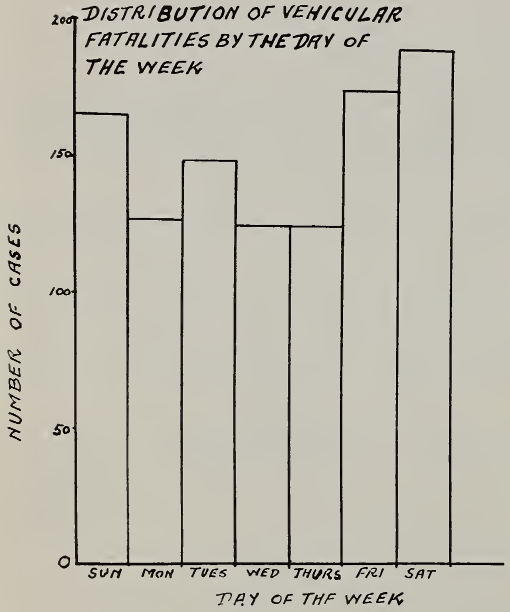

CHART 3

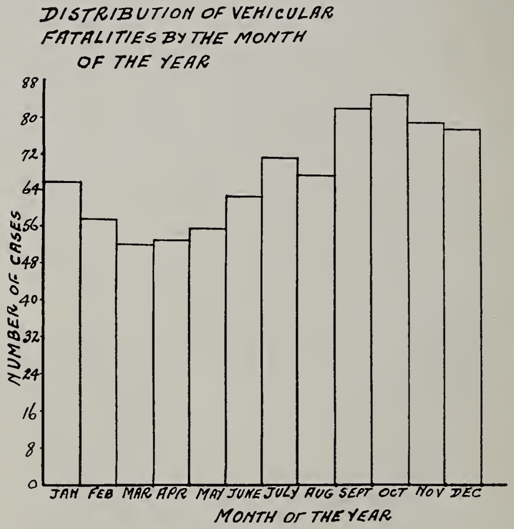

CHART 4

In Table No. 2 can be seen the nature of the injury incurred by the victim in these fatal accidents. In the cases where the physical injury was minor, contributing factors, such as senility, or complications such as pneumonia, usually contributed materially to the cause of death. In two cases where the car ran over an embankment into the lake, drowning of the occupants was the actual cause of death. In another case, there occurred a peculiar state of circumstance where, after a collision with a telephone pole, an occupant of the car stepped into a puddle of water, made contact with a high-tension electric wire and died from electrocution. In three instances following the impact of two automobiles, fires resulted in which the six victims died more from the effects of fire than from trauma to the body resulting directly from the impact of the accident. Though these exceptional cases did not result in death directly from the physical violence of the accident, the cases must, nevertheless, be classified as vehicular fatalities because of the series of events leading to their deaths was initiated by the accident. It is interesting to note that the most vulnerable portion of the human body is, as far as vehicular accidents are concerned, the head. Of these victims, 484 or 60 per cent suffered injury to the skull or brain.

TABLE No. 2

Nature of the Injuries Resulting From the Vehicular Accidents

Nature of Injury	Number of Cases
Fractured Skull	440
Brain Laceration and Hemorrhage	10
Concussion of Brain	34
Crushed Body	1
Crushed Chest and Fractured Ribs	21
Undetermined Internal Injuries	197
Fractured Extremities	39
Dislocated or Fractured Spine	29
Lacerated or Contused Heart	6
Fractured Pelvis	14
Second and Third Degree Body Burns	6
Lacerated Neck	4
Fractured Jaw	1
Drowning	3
Electrocution	1
Total	806

TABLE No. 3

Occupation of the Fatal Vehicular Victims

Group	Number of Cases Male	Female
Professional Persons	6	5
Business Persons	65	7
Skilled Labor	228	9
Unskilled Labor	155	11
Housewives	0	106
Students	58	18
Pre-School Children	15	10
No Occupation or Retired	43	1
Not Stated	55	14
Total	625	181

Table No. 3 indicates the occupation of the victims in this series of cases. Of the total 806 cases, only 37 or 4.6 per cent of the victims were engaged in their routine occupation at the time of the accident.

TABLE No. 4

Distribution of the Fatalities Among the Drivers and Passengers of Cars According to the Activity of the Automobiles at the Time of Accident

	Number of Cases
Making Right Turns Improperly	7
Making Left Turns Improperly	10
Backing Up	1
Speeding	63
Did Not Have Right of Way	50
Cutting In	5
Wrong Side of Road	6
Drove Into Safety Zone	25
Stalled on Railroad Tracks	1
Auto Races	3
Disregarded Traffic Signal	25
Fell Asleep While Driving	5
Other Improper Driving	35
No Improper Driving	41
Parked	7
Not Stated	3
Total	287

In Table No. 4 there is an analysis of the activity of the automobiles at the time of the accident in which the occupants, both drivers and passengers, lost their lives. Of the 287 cases, 149 were drivers and the remainder were passengers. In many instances, the passengers in automobiles have been killed as the result of the accident whereas the drivers escaped with minor injuries. It is extremely significant to see that in only 51 cases or 6.3 per cent was there no illegal activity on the part of the car. Three of these cases were deaths suffered during professional automobile races. In seven cases the cars were parked when they were struck by other speeding automobiles. In the one case where the occupant stalled on railroad tracks, the driver can still be held guilty of his own death because he should not have attempted crossing the track if the train was too soon upon him to prevent him from getting out of the car and leaving the vicinity.

Even more striking was the analysis of the activity of the pedestrians, cyclists, roller skaters and other victims at the time of their accident (see Table No. 5). In only 127 cases or 15.6 per cent were these victims not at fault in one way or another. In the other cases, as indicated in the chart, the individuals were all doing one thing or another that can be classed as illegal, foolish or careless.

TABLE No. 5

Activity of Pedestrians and Victims Other Than Occupants of Automobiles at the Time of the Accident

	Number of Cases
Crossing Intersection Against Signal	111
Crossing Intersection Diagonally	18
Crossing in Middle of Block	174
Playing in Roadway	16
Walking in Roadway	20
Walking Between Parked Autos	21
In Street on Roller Skates	1
Standing in Street	5
Undetermined, Found on Street	7
Riding Bicycle in Street	9
On Railroad Right of Way	8
Fell in Street	1
Playing in Gas Station Yard	1
Crossing Intersection With Signal	74
Working in Roadway	5
Waiting in Safety Zone for Street Car	6
Getting on or Off the Street Car	6
Getting on or Off Other Vehicles	9
Struck by Car Backing Up	15
Cranking Truck	1
Changing Tire	2
In Private Driveway	2
Walking on Sidewalk	6
Mowing Lawn	1
Total	519

Tables No. 6, 7 and 8 present an analysis of the road conditions, the light conditions and the weather conditions at the time of the accident. It is extremely impressive that, by far, the greatest number of cases occurred on dry paved roads in day-light or at night with good lighting conditions and when the weather was clear.

For the three-year period since January of 1937, we have employed a modification of the Nicloux procedure[1] for the determination of alcohol concentration of the blood and urine of victims of vehicular accidents brought to the Cuyahoga County Morgue. This examination was made on individuals over 15 years of age with the assumption that younger individuals would not imbibe intoxicating beverages. Persons who were injured and died more than 24 hours following their accident were not tested inasmuch as all traces of alcohol would have disappeared by this time. During the three years, the body fluids could be tested for the presence of alcohol in only 410 cases. Of this number, 224 or 54.6 per cent of the cases showed alcohol to be present in their blood or urine.

TABLE No. 6

Distribution of the Fatalities According to the Physical Condition of the Road on Which the Fatal Vehicular Accidents Occurred

Condition	Number of Cases
Dry	603
Wet	114
Snowy	43
Icy	37
Muddy	9
Total	806
Paved	774
Unpaved	6
Gravel	6
Road Under Repair	1
Not Stated	19
Total	806

TABLE No. 7

Distribution of the Fatalities According to the Lighting Conditions at the Time of the Fatal Vehicular Accident

Condition	Number of Cases
Day Light	271
Dusk	103
Dark With Good Light	290
Dark With Poor Light	79
Unknown	63
Total	806

TABLE No. 8

Distribution of the Fatalities According to the Weather Conditions at the Time of the Fatal Vehicular Accident

Condition	Number of Cases
Clear	451
Cloudy	140
Foggy	21
Rain	49
Sleet	12
Mist	16
Snow	15
Unknown	102
Total	806

On further analysis, it was found that 149 cases of these victims that were tested were drivers of automobiles. Seventy-nine of the cases were tested for the presence of alcohol. Forty-seven of this group or 59.5 per cent revealed the presence of variable concentrations of alcohol in the blood or urine. Of the 519 victims who were pedestrians, 258 were tested and 146 or 56.6 per cent of the cases had variable quantities of alcohol. The remaining 137 cases were passengers in automobiles that were driven by other individuals who may or who may not have suffered death in the same accident. Of this group, 73 were tested and 31 or 42.5 per cent presented varying concentrations of alcohol in their blood or urine.

SUMMARY AND CONCLUSIONS

The greatest number of fatalities from vehicular accidents occurred among healthy individuals, chiefly male adults in the prime of life and in the period of greatest productivity. The accidents resulting in their death occurred, in the vast majority of cases, during the leisure hours of these individuals, chiefly in the evening or the early morning hours and during the week-ends. The accidents occurred under ideal weather conditions, on good dry roads and under good lighting conditions. By far, the greatest number of victims were pedestrians. In the majority of cases, these victims were to some degree guilty for the accident. The head is the most frequently injured portion of the anatomy. It has been demonstrateed that in all groups of victims, pedestrians, drivers of automobiles and the others, that there was an extremely high incidence of alcoholism. In regard to the children, the deaths occurred at a period when they were not at school and not under the surveillance of the school authorities.

In conclusion, it cannot be too emphatically stressed that, by far, the guilt for the accident and death of the individual must be placed, in the vast majority of cases, upon the victim. Alcoholism with the attendant varying degrees of alcoholic intoxication can be considered the greatest single factor. Failing the stigma of alcoholic intoxication, physical disability, road and weather hazards, carelessness must then be considered the next most important factor. The possibility may exist, in a smaller group of cases, that there may be an utter disregard for the law and the welfare of others by either the victims or the other party to the accident. It is highly probable that had not other persons, pedestrians and drivers of cars, been overly cautious or quick, the death toll might have been greater. Responsibility for the death of school children in these vehicular accidents must be placed upon the parents in large measure for lack of parental supervision of the activity of the children outside of the school hours. Responsibility may fall in part upon the city for failure to provide adequate recreation parks so that these children may be kept off the streets. The latter possibility, however, has not been sufficiently studied but, nevertheless, represents a strong assumption.

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One Hundred Drunken Drivers

E. B. MOZES, M.D., and L. J. KATONAK, B.A., M.A.

ELEVEN per cent of drivers involved in fatal accidents and 20 per cent in all accidents in 1939 had been drinking. One out of four persons in fatal accidents including both drivers and pedestrians has been under the influence of alcohol. Definitions of drunkenness in the several states on whose report these figures are based vary considerably. Special surveys employing chemical tests indicate that the role of alcohol as a contributing factor in automobile accidents is even greater. Heise investigating 119 consecutive accident cases found that in 74 of them a drunken driver was involved, and these alcoholic accidents accounted for injuries to 155 persons. Of these 49 per cent had 0.02 per cent of alcohol in the blood and 31 per cent 0.15 per cent or more. In New York City of 107 drivers killed in 1935, 36 and 37 the brain tissues of 53 showed no alcohol, 9 showed traces, and 45 showed 0.1 per cent or more. Breath tests made on 1750 drivers stopped at random at Evanston, Ill., brought out that 12.1 per cent had been drinking, and 0.42 per cent had 0.15 per cent or more alcohol in the blood. Of 270 injured drivers brought to Evanston hospitals altogether 46.6 per cent had had some alcohol and 13.8 per cent more than 0.15 per cent. Thus there were 33.1 times more persons definitely intoxicated among those injured than in the average driving population. Comparisons based on these figures show that a driver whose blood contains 0.15 per cent alcohol is 55 times more likely to become involved in a personal injury accident than a person whose blood contains no alcohol.

The first approach in any intelligent attempt to reduce the appalling toll exacted by drivers who are obviously unfit to be sitting behind the wheel because of self-induced disability is to establish responsibility in each case by correct diagnosis. Two questions naturally arise. First, Can we establish beyond any doubt the presence of alcohol, and secondly: Is it possible to determine the degree of disability caused by it? To neither of these can clinical observations alone give adequate answer. Jetter reports that of 1150 patients admitted to the Buffalo City Hospita with the preliminary diagnosis of acute alcoholic intoxication 150 had no traces of alcohol in blood or urine. Conditions mistaken for alcoholic intoxication included acute appendicitis, drug poisoning, cardiovascular accidents, skull fracture, septicemia, ruptured bladder and ruptured gastric ulcer. Diagnosis especially becomes difficult in cases involving loss of consciousness. As to the degree of intoxication the variety or severity of clinical symptoms are not very dependable guides. Symptoms are due to interplay of character, emotional make-up, psychological factors, and the effect of alcohol itself, therefore they vary considerably in different persons and even in the same person under different conditions.

Chemical analyses of various body fluids and expired air are valuable aids in the diagnosis of acute alcoholic intoxication. They prove beyond doubt not only the presence or absence of alcohol but also its concentration in the body. Numerous experiments have demonstrated that the effect of alcohol is roughly proportional to its concentration in the tissues. Laboratory experiments, such as the painstaking work of Miles and others show that alcohol even in very small concentrations appreciably lowers human efficiency. But for legal purposes such minute distinctions are neither desirable nor practical. What we want to know is the alcoholic concentration in the tissues and body fluids which actually renders a person unfit to drive an automobile.

Experiments bearing directly on the relationship of alcohol concentration and performance of tasks involved in driving are not very numerous. Sachsenberg at Dresden in 1938 in collaboration with engineers and psychologists found that an alcohol concentration of 0.02 per cent in the blood incapacitated 20 per cent of the drivers tested; 0.05 per cent 49 per cent; 0.1 per cent 87½ per cent, and the driving ability of every one was definitely impaired when alcohol rose to 0.14 per cent. In comparison with this when clinical symptoms alone were used as criteria of intoxication in the series collected by

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Submitted August 7, 1940.

From the Health Department Laboratory, Canton, Ohio.

Widmark only 49 per cent, by Schwartz 93 per cent, Harger 50 per cent, and Bogen 56 per cent of those having an alcoholic concentration of from 0.1 to 0.15 per cent were adjudged under the influence of alcohol. The Institute of Medical Jurisprudence at Wurzburg University carried out tests on the effects of alcohol on six motorcycle drivers. The average alcohol value was 0.12 per cent. All showed impaired efficiency, five increased their speed considerably. Yet none of the drivers could be called drunk in the ordinary sense of the term.

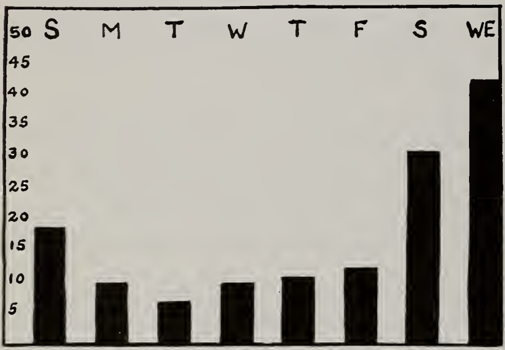

Fig. 1—Arrests according to the day of the week. WE. Week-end—from Saturday Noon to 6 A.M. Monday.

A. R. Lauer performed experiments on laboratory apparatus developed by the National Research Council for evaluating driving performance. Three of his subjects consumed seven and one-half ounces of whiskey and one five ounces. He found that noticeable effect on behavior occurs at 0.035 to 0.065 per cent, that there is about 25 per cent loss in judgment, 23 per cent in motor performance and 14 per cent in sensory capacities.

The most conclusive evidence, however, is offered by the careful experimental work of Dr. Heise. He examined several persons under actual driving conditions after they had consumed 150 cc. of whiskey. "With no exceptions these subjects were able to pass creditably the ordinary tests used to determine drunkenness and were able to perform the routine actions involved in driving. However, there was a definite variation from the normal in actions that had not become a habit." All subjects showed "a lack of appreciation of changes in judgment and motor control." The alcohol concentration did not rise above 0.10 per cent.

What is the concentration at which a person's ability is sufficiently impaired to consider him under the influence of alcohol in regard to automobile driving? In European countries with compulsory chemical tests for drunken drivers this level is placed sometimes as low as 0.07 per cent. Yet, at this level very few persons show recognizable symptoms of intoxication and it would be extremely difficult to prosecute them in our courts. Realizing this, the National Safety Council recommended that a concentration of 1.5 per thousand or over of the blood should be considered prima facie evidence of intoxication. The report of the Committee on Motor Vehicle Accidents of the American Medical Association recommended and the House of Delegates adopted the same figure. Indiana, Maine and Illinois incorporated this in their respective statutes. This concentration will be reached by an average person weighing 150 pounds after a fairly rapid consumption of 6 to 7 ounces of whiskey. This is a rather high figure and we can be certain that practically every one with that much alcohol in his blood is a definite menace to the safety of others and to himself.

We present the results of the study of 100 drunken drivers on whom clinical observations and chemical findings were correlated. These are out of 106 drivers arrested under this charge by the Canton Police Department between January 1 and July 27, 1940. The method of procedure is for specially trained officers to take the breath test on the Harger Drunkometer in all cases, collect urine in some, and fill out the Alcoholic Influence Report Form devised by the Committee on Intoxication of the National Safety Council. Due regard must be given to the intelligent cooperation of the police, for the data thus obtained proved highly satisfactory and entirely dependable, as checks of clinical observations in many cases by one of us and the parallel results where both breath and urine tests were made have demonstrated. The carbon dioxide absorption tubes used in the drunkometer are sealed with the city seal in specially constructed metal tubes. The urine bottles are likewise sealed and both sent to the Health Department Laboratory. This method of sealing, introduced by the Safety Director, saved us much trouble in contested cases as the identity of the specimen could be readily established without having to put too many officers on the stand to account for every minute while the specimens were held at Police Headquarters.

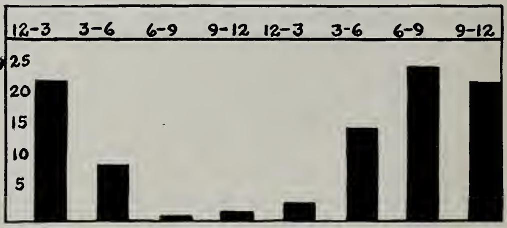

Fig. 2—Arrests according to the time of the day.

The Harger Drunkometer test is based on the observation that the concentration of alcohol in the alveolar air is directly proportional to its concentration in the blood. To determine this the person to be examined blows up a rubber balloon and the air from this is bubbled through a test tube containing 1 cc. of N/20 potassium permanganate in 10 cc. of 55 per cent sulphuric acid; from here the air passes through a dehydrating tube and thence through a carbon dioxide absorption tube. If alcohol is present in the sample the reagent solution will change from purple to amber. Since it takes 0.169 mgr. of alcohol to completely reduce this amount of potassium permanganate and the weight of carbon dioxide absorbed in the tube represents the volume of air which contains this much alcohol the concentration can be readily calculated. It has been found that 2000 cc. of alveolar air contains exactly as much alcohol as 1 cc. of blood and thus the result can be expressed in blood concentration.

The urine alcohol determination is carried out by the Heise colorimetric method. Ten cc. of urine is distilled with 10 cc. of picric acid and the first 10 cc. of the distillate collected. To 1 cc. or a fraction of the distillate 3 cc. of potassiumbichromate reagent is added and heated for 4 minutes. The color of the resulting reduction is compared with standards containing known amounts of alcohol and the alcohol content of the examined specimen is thus obtained.

Of 106 drivers arrested during this period eight refused to submit to the breath test but two of these gave urine specimens. In 24 cases both urine and breath were obtained, in two cases urine alone and in 74 breath alone.

Arrests for drunken driving constitute 9.7 per cent of all arrests for moving vehicle violations, but if we leave out arrests for minor violations and consider only those made for more serious infractions of the law we find that arrests for this cause alone account for 46 per cent.

All of the drivers arrested were males between the ages of 20 and 72. The largest number, 30, was between 30 and 40, and the next largest, 24, between 40 and 50. Our observations as to the day of the week and time of day of arrests are in striking conformity with results obtained by other investigations. The largest number of arrests, 31, fell on Saturday, the next largest, 19, on Sunday. Thus these two days account for exactly half of the cases. During the week-end, that is from Saturday noon to 6 a.m. Monday there were 43 drivers arrested. Figure 1 gives the complete results. In Figure 2 the cases are grouped according to the time of day. It can be seen that 25 arrests were made from 6 to 9 p.m., 23 from midnight to 3 a.m., 22 from 9 p.m. to midnight. Arrests from 6 a.m. to 6 p.m. total 21, those from 6 p.m. to 6 a.m. 79.

On the clinical side of the picture we laid special stress on observations relating to mental disturbances, effects on balance and walk, defects of speech, finger-to-nose test, and to a lesser degree on condition of the face, whether flushed or pale, eyes and pupils, and odor of breath. Alcoholic odor was noted in every case, staggering or swaying was present in 83, face affected in 80, disturbances in behavior were observed in 76, and in 58 there was noticeable change in speech.

Table 1 shows the correlation between observation and body alcohol concentration.

The classification as to the degree of drunkenness may seem, and probably is, more or less arbitrary. As we have already pointed out, the sum total of outward signs and symptoms is not a very dependable guide to the degree of impairment in psychomotor functions. There is no single symptom or any combination of symptoms which would allow us to form a definite idea of the degree of intoxication. Especially is this true under conditions that involve arrest and detention in jail. Many people are able "to pull themselves together", or to summon reserve mental energy when trying to disguise their condition. The shock of accident and the realization of arrest have in many cases a sobering effect. We have repeatedly examined suspects in jail who were to all intents "cold sober", and yet when questioning the arresting officers we have found that these persons acted in a typically intoxicated manner prior or just after the arrest, and also found that as soon as they were led back to their cells all the serious symptoms of intoxication immediately reappeared. In all these cases the chemical findings revealed the real extent of alcohol effect. The mere fact of the arrest in non-accident cases shows that the performance of the driver must have been erratic enough to attract the attention of the officers.

	MGR. ALCOHOL IN 2000 cc. ALVEOLAR AIR						
	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	Over 3.0	Total
Not Influenced	2		1				3
Slightly Influenced		3	5	2	4		14
Moderately Influenced		6	15	16	10	6	53
Strongly Influenced		1	9	5	7	8	30
Total	2	10	30	23	21	14	100

Table 1—Correlation of symptoms and alcohol concentration.

We feel it would be more desirable if beside, or even in place of routine observation, some simple coordination tests were made to corroborate the chemical findings. The examining officers in the Canton Police Department, at their own initiative, introduced a practice of having the suspect sign his name on the report form. Writing is a highly complex neuromuscular function and is early and considerably disturbed by the influence of alcohol. Such signatures can be used very effectively in court when compared with the defendant's handwriting under normal conditions.

In 24 cases breath and urine examinations were made simultaneously. The ratio of alcohol in these between 2000 cc. of alveolar air and 1 cc. of urine is 1; 1.16 which closely agrees with the result recently obtained by Bavis. The close agreement of breath and urine alcohol may be more apparent than real since these figures represent different phases of the absorption-elimination curve. Preliminary results in our series of experiments on human subjects now in progress indicate a far wider individual variation in this ratio. Figure 3 gives the detailed diagram of all values found.

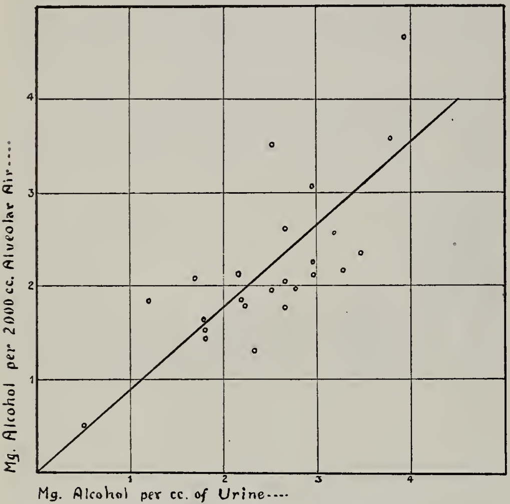

Fig. 3—Correlation of breath and urine alcohol.

In conclusion we would like to emphasize again the importance of chemical tests in evaluating the influence of alcohol on human performance. As far at least, as operation of a motor vehicle is concerned the alcohol concentration of various body fluids and expired air furnishes a far more reliable index of the degree of alcohol influence than the most careful and detailed clinical study. Chemical tests for alcohol, unfortunately too much neglected by the profession, are a valuable addition to the armamentarium of legal medicine.

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Epilepsy

Bromides and phenobarbital, the sheet anchors of treatment, are being superseded by dilantin sodium. This new drug is far superior to anything we have ever had before and patients having two or three attacks a week on full dosage of phenobarbital or bromides have one attack every two or three months, or none at all on dilantin. Dilantin is less uniform and more toxic in its action and sometimes produces acne, nervousness, vertigo, nausea, blurred vision or swelling of the gums. Patients should be warned never to stop medication suddenly, even for two or three doses, as this is apt to bring on a spell. Medication should be continued for at least a year after the last seizure to prevent recurrence of attacks.

Ketogenic diets have been advised but in my opinion are not warranted. The diet is hard to follow and produces an autointoxication that is almost worse than the disease. It would seem more logical to administer the sedation by mouth and preserve the health of the patient by an adequate diet.

Restriction of fluid intake is probably of help and easily instituted. Various operative procedures have been advanced but none found acceptable, except in Jacksonian epilepsy with organic cortical irritation.

There are many things a patient can do to help. Regular living with freedom from excitement is necessary. The bowels should be kept open, preferably with milk of magnesia, as the magnesia has a sedative action itself on the cortical neurons. — Frederick Lemere, M.D., Seattle, Wash.; Northwest Med., Vol. 39, No. 8, August, 1940.

The Clinical Use of Sulfamethylthiazole in Pneumococcal Pneumonia

J. M. RUEGSEGGER, M.D., and MORTON HAMBURGER, M.D.

THE discovery by Domagk that certain dyes possess bacteriostatic activity has stimulated great advances in the field of therapeutics. The wealth of literature of clinical reports is an indication of the universal acceptance of these drugs in the therapy of certain diseases, especially infections due to the members of the pneumococcus family and those due to B-hemolytic streptococcus. Despite their effectiveness, search for a derivative of greater activity and/or less toxicity has continued. Fosbinder and Walter[1] described in 1939 two sulfonamides which gave promise of clinical applicability and usefulness. Barlow and Homburger[2] subsequently showed that these new derivatives, thiazole analogues of sulfapyridine, prolonged the lives of mice infected with Staphylococcus aureus. Herrell and Brown[3] and Carroll, Kappel, Jones, Gallagher, and Di Rocco[4] have published clinical reports tending to show that one of these drugs is effective against human infections with Staphylococcus aureus.

McKee, Rake, Greep, and van Dyke[5] and others tested the activity of these drugs against streptococci and pneumococci in vitro and in vivo and found that the activity of the thiazoles probably equalled that of sulfapyridine. Preliminary experiments of van Dyke and his associates[6] tended to show that sulfathiazole may be less toxic than sulfapyridine.

Because of these promising preliminary trials, the present study of the efficacy of sulfamethylthiazole* in the treatment of pneumococcal pneumonia was undertaken. Cases were selected for clinical trial, rather than treating every case within a certain time limit. Patients moribund or critically ill on admission were rejected as unsuitable; similarly, patients late in the course of their disease and those who appeared to be recovering spontaneously were omitted from this series. Because of the clinical uncertainty of the drugs, patients were treated with serum in addition to the drug if no clinical improvement was noted after 24 hours of therapy; this report, however, includes only those patients treated exclusively with the drug. The sputa of all patients were typed before therapy was started; likewise, a blood culture was taken on every patient. Blood cultures were repeated on all patients showing an initial bacteriemia.

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Some difficulty was experienced in determining the satisfactory dosage of this drug. At first an attempt was made to administer enough of the drug to maintain a blood level of 7 mgms. per cent ±; with few exceptions considerably larger doses were necessary than has been our experience with sulfapyridine. Later, it was observed that equally good therapeutic results could be obtained with smaller doses. Preliminary studies had shown that the drug disappeared from the blood stream much more rapidly than does sulfapyridine. Chart No. 1 illustrates the successive blood levels of a single patient after the intravenous injection of 4 grams of the sodium salt of sulfamethylthiazole. Chart No. 2 illustrates the same phenomenon after a single oral dose of 4 grams in two patients; it also shows the relatively rapid absorption of the drug. Conjugation occurs but excessive conjugation was not encountered in this study. There was no apparent close correlation between dosage and blood level although no attempt was made to regulate dosage according to the weight of the patient. The drug was administered by mouth to all patients.

Fifty adult patients with typical pneumonia were treated with the drug alone. Table 1 shows the distribution of types of pneumococci causing the disease in each instance; paucity of cases due to Pneumococcus III is entirely fortuitous and does not represent any unnatural selection. Twenty per cent of the patients had bacteriemia at the time chemotherapy was instituted; bloodstream invasions varied from growth in broth only to 245 colonies per cc. Age distribution was typical of the penumonias seen in this institution in previous years, limits being 14 and 67 years, respectively. Nine patients had multilobar

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From the Department of Internal Medicine, University of Cincinnati College of Medicine, and the Cincinnati General Hospital.

This study was aided by a grant given in honor of Craig Yeiser.

Submitted September 9, 1940.

*The drug used in this study was generously supplied by the Winthrop Chemical Company and the Lederle Laboratories, Inc.

disease while the remaining had a part or all of a single lobe involved. Two patients had otitis media due to the homologous organism on admission, but none developed pneumococcal complications after therapy was instituted. Two patients died after receiving 92 and 112 grams, respectively. The first patient had pneumonia secondary to asthma; although he cleared his blood stream of 49 colonies of Pneumococcus XX, his asthma became worse and he died four days after therapy was begun, a necropsy was not performed. The other fatal case will be described later.

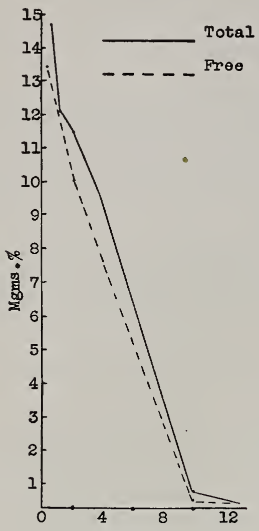

CHART 1

Clinical improvement was observed in all of the patients after administration of the drug. As a rule, diminution of pulse rate and lowering of the temperature could be noticed within 12 to 18 hours after institution of chemotherapy; in about one half of the cases, a critical fall in temperature occurred. In those patients who had bacteriemia, subsequent blood cultures showed either a sterilization of the blood stream or a diminution in the colonial count of the blood culture. In no instance did invasion or reinvasion of the blood stream occur after drug therapy had been instituted. Likewise, extension from the original lesion was not observed even in the two fatal cases. Finally, no patient receiving the drug developed a purulent pneumococcal complication.

The drug shares the predilection of other sulfonamides for causing unpredictable toxic manifestations in certain patients. Twelve of the patients complained of considerable nausea after ingesting the drug and three vomited persistently; however, it was not necessary in any instance to discontinue therapy on account of these symptoms. One patient complained of generalized headache throughout the course of therapy and seven became confused for varying periods. Two patients developed fever after an afebrile period; a diffuse macular rash, limited to the trunk and arms, was associated with the fever in one instance; fever subsided and the rash disappeared promptly in both instances on discontinuing the drug. Diffuse abdominal pain, not otherwise accountable, was observed in four patients. In this series, hematuria or signs of urinary calculus was not observed; this is especially remarkable in view of the very low solubility of both sulfamethylthiazole and its acetyl compound. Four patients had high blood levels of urea nitrogen yet tolerated the drug without event. No examples of blood dyscrasia were observed in this series; five patients had leucocyte counts of 10,000 or less when chemotherapy was initiated, yet no evidence of bone marrow depression was seen.

One patient, through an error, received more of the drug than was expected and showed a blood level of 18.2 mgms. per cent; he complained of inability to see well and lapsed into a coma punctuated by generalized convulsions. He died 36 hours later showing diffuse focal cortical hemorrhages at necropsy. This probably represents a true case of sulfamethylthiazole intoxication but the patient's occupational exposure to lead made such a diagnosis hazardous. At necropsy, findings suggested a new type of intoxication despite an unusually high lead content of the blood and tissues.*

SUMMARY

No conclusions concerning the efficacy of a new drug would be warranted from a series of 50 selected cases. Sulfamethylthiazole was administered to 50 patients with typical pneumococcal pneumonia, of whom two died. It was shown to have distinct merit as a therapeutic agent in this disease. So-called "toxic" reactions to the drug were expected and observed. The drug deserves

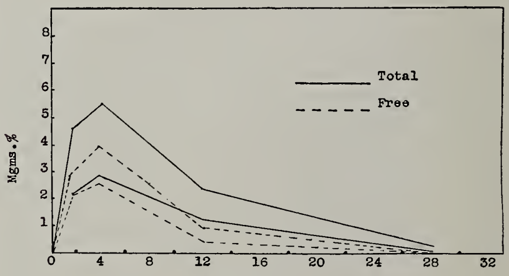

CHART 2

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*A complete histological report of this case by Doctors E. Roseman and C. D. Aring of this department will appear in the New England Journal of Medicine.

TABLE I

Number	Color	Sex	Age	Bacteriology		Lobes Involved	Day of Disease	Total Dose	Highest Blood Level	Remarks	Outcome
				Sputum	Blood						
1	C	M	26	I	I	LL	4	48	7.4		L
2	W	M	41	I	Neg.	LL	3	56	5.2		L
3	W	M	38	I	Neg.	LL	?	65	6.3	Sterile pleural effusion. Drug fever and rash.	L
4	W	F	28	I	Neg.	LL	1	106	6.6		L
5	W	M	43	I	Neg.	RU RM	2	88	7.9		L
6	C	M	30	I	I	RL	3	42	3.7		L
7	C	F	17	I	Neg.	LL	2	30	5.7		L
8	W	F	30	I	Neg.	RM RL	4	124	5.1	Nausea and vomiting.	L
9	C	F	39	I	Neg.	RL	3	136	3.3		L
10	C	M	17	I	Neg.	RU	2	100	9.0		L
11	C	F	38	I	Neg.	LL	7	88	4.9		L
12	C	M	39	I	Neg.	LU	4	34	6.5	Uremia on admission; vomited considerably.	L
13	W	F	36	I	Neg.	RL	4	68	5.3	Otitis media due to Pneumococcus I.	L
14	C	M	32	I	Neg.	RL	3	33	5.1		L
15	W	M	29	II	Neg.	RM	1	47	6.6		L
16	W	M	37	II	Neg.	RL	1	52	5.1		L
17	C	M	45	II	II	RM RL	2	86	7.4	Very slow resolution.	L
18	W	M	29	II	Neg.	RU LL	4	68	3.0	Conjugated 45% of drug.	L
19	W	M	37	II	Neg.	LL	4	55	4.8		L
20	W	M	45	II	Neg.	LL	4	49	3.3	Leucopenia on admission.	L
21	C	M	32	III	Neg.	LL	2	112	18.2	Convulsions and coma.	D
22	C	F	44	III	Neg.	RU	10	40	1.8	Jaundice on admission.	L
23	C	M	26	IV	Neg.	LL	3	144	4.9		L
24	C	F	28	IV	Neg.	RM	2	54	4.8		L
25	C	M	31	IV	Neg.	RU	2	296	4.0	Sterile Pleural effusion on 8th day.	L
26	W	M	17	V	Neg.	LL	4	66	8.5		L
27	W	M	64	V	V	RL	4	83	4.5	Slow resolution.	L
28	W	F	41	V	Neg.	RL	5	72	4.1		L
29	W	F	56	V	Neg.	RM RL LL	4	132	2.5	Considerable nausea.	L
30	W	M	21	V	Neg.	RL	2	34	5.7		L
31	C	F	56	V	Neg.	RL	2	43	12.0	Abdominal pain, mental confusion.	L
32	W	M	32	V	Neg.	RM	2	61	4.4	Otitis media due to Pneumococcus V.	L
33	W	M	26	V	Neg.	RL	4	45	5.1		L
34	C	M	33	VI XV	VI	LL	1	64	6.4		L
35	W	M	14	VII	Neg.	RU	2	41	4.4		L
36	W	F	25	VII	Neg.	LL	2	63	2.4		L
37	W	M	32	VII	Neg.	LL	2	34	6.4		L
38	C	M	37	VIII	VIII	LL	1	38			L
39	W	M	37	XII	XII	RL	2	32	3.3		L
40	C	M	41	XIV	XIV	RL	?	135	1.9	Slow resolution.	L
41	C	M	40	XVII	Neg.	RL LL	4	90	4.4		L
42	C	M	34	XVIII	XVIII	LL	2	19	3.9		L
43	W	M	23	XIX	Neg.	LL	1	30	5.6		L
44	W	M	27	XIX	Neg.	RM RL	1	60	5.6		L
45	C	M	16	XIX	Neg.	RL	3	43	4.8		L
46	W	M	57	XX	XX	RM RL	?	92	14.0		D
47	W	M	35	I IV XIV	Neg.	LU LL	2	48	7.7		L
48	W	M	51	III VIII	Neg.	RU LL	4	53	4.0	Leucopenia on admission.	L
49	W	M	67	XVII XXIX	Neg.	RL	2	23	2.9		L
50	W	M	23	XXIII XXV	Neg.	RM	5	62	2.3		L

further trial to determine whether its disadvantages outweigh its usefulness in medical therapy.

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Experiences in the Treatment of Pneumonia

ROBERT A. READING, M.D., and CLARK H. MILLIKAN, M.D.

IN view of the many conflicting results being reported in the treatment of the pneumonias, it was thought that additional statistics would be of use in evaluating present trends in therapy. With sufficient cases listed, one may soon evaluate the relative merits of antipneumococcic sera, sulfapyridine, or a combination of both, as well as the indications and methods of administration. The following studies might be of special value as representing typical clinical cases as received into a large general hospital to be handled by a varied group of clinicians whose sole interest is in promoting a rapid recovery. With good cooperation from the house staff, certain principles of administration can be followed in most cases.

Upon the patient's admission to the hospital, the conventional blood count, X-ray, sputum typing and blood culture were done when possible. If serum was to be given, both the skin and conjunctival sensitivity tests were employed.

A brief summary of our series of 150 cases collected before sulfapyridine became popular, is shown in the following table. Cases which expired within 24 hours of admission, or cases having another major disease, were not included. The majority were admitted within the first four days of the illness.

TABLE I

White	Colored	Male	Female	Age		Sputum Typing			
				Years	No.	Type	No.	Type	No.
146	4	82	68	13-20	8	1	19	16	1
						2	3	17	1
				20-50	75	3	13	18	1
						4	3	20	2
				Over 50	67	5	3	22	1
						7	5	24	1
						8	3	27	1
						11	1	Multiple	
						13	1		6
				Typing not done					28
				No pneumococci found					61

Early in our experiences with serum we concluded that large doses given early in the disease were preferable to smaller doses over a longer period of time. Our results with those of others seem to substantiate this phase of serum administration. Consequently, on admission an effort was made to evaluate the patient's general condition and the amount of toxicity manifested. When the patient did not appear overwhelmed by the infection and the skin, as well as eye tests were negative, the usual procedure was to administer 40,000 units every two to three hours until improvement was shown. In cases which were very toxic 100,000 to 200,000 units were injected in one dose, usually diluted in a small amount of saline.

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To our knowledge, we have never had a definitely positive ophthalmic reaction with antipneumococcic serum. If the skin reaction is positive but not markedly so, our procedure for administering serum consists of beginning an intravenous saline infusion using 200 to 300 cc. of saline to which one minim of serum has been added and mixed. Then in 20 minutes two minims are added, then four, then eight; if no reaction has occurred up to this point the entire amount to be given is added to the saline. In only one case which had a strong four plus skin reaction and a history of hay fever were we afraid to administer serum. There were no major reactions to either the horse or rabbit sera used.

An illustrative case was that of a white male 37 years of age, admitted on the estimated third day of disease with types 1 and 28 pneumococci in the sputum. Lung puncture revealed a type 1 organism in the left lower lobe. That evening he was given 100,000 units and the temperature dropped from 40.8 to 38.5 but was soon back to 39.1 when 160,000 units were given in one dose. The temperature promptly fell to normal to remain so with an uneventful recovery.

One more example was that of a white male, 40 years of age, admitted on the seventh day of illness which involved the right middle and lower lobes, as well as the left lower lobe. Sputum revealed a type 19 pneumococcus as did the blood culture. He received 200,000 units as an initial dose with a crisis within 16 hours. This patient also received sulfapyridine but when the temperature began to rise again, he received 160,000 units on the third day with a quick response the second time which was maintained.

Of our 106 cases of untreated pneumonia, there was a mortality of 17 or 16 per cent. In 44 cases treated with type specific serum, there were three deaths or a mortality of 6 per cent. Two of these were type 3 penumococcic infections in elderly people, while the third was a type 2 septicemia.

Submitted September 12, 1940.

In this series there were only eight bacteriemic cases and only two complicating empyemas.

Only those cases which did not respond to sulfapyridine alone or which presented a picture of fulminating disease from the onset were given both serum and sulfapyridine. There were 10 such cases among which there were two deaths. In spite of this high mortality, it was thought that the combined use of sulfapyridine and serum was more effective in these severe cases than the use of either one alone.

The 102 patients in a series treated only with sulfapyridine were admitted to St. Luke's Hospital between January 1, 1939, and March 15, 1940. They were all 13 years of age or over. Each had an acute respiratory infection clinically diagnosed as pneumonia which diagnosis was confirmed on roentgenogram examination. Only uncomplicated cases are included in the series.

The following tables give the age incidence, distribution by color and age, and results of X-ray and sputum typings with the cases of bacteriemia included.

TABLE II

White	Colored	Male	Female	X-ray		Age		Type Pneumo.	No.+ Sputum	No.+ Blood Cultures
93	9	55	47	Generalized	43	Years	No.	1	3	1
						13-20	5	2	2	
				One lobe	37	20-40	38	3	8	2
						40-60	39	6	1	
				Two or more lobes	22	60-70	9	7	1	
						Over 70	11	9	1	
								13	4	
								14	2	1
								16	1	
								17	1	
								20	8	
								28	1	

It is interesting to note that no case developed a blood culture positive for pneumococci while on sulfapyridine therapy.

Treatment was begun on an average of 50 hours after the onset of symptoms. However, in 58 cases sulfapyridine therapy was started in 24 hours after the patient became ill and in only 22 cases was treatment begun more than 96 hours after the first symptom.

In 62 cases two grams of sulfapyridine were given when the diagnosis was made and the same dose repeated in four hours followed by a maintenance dose of one gram every four hours. In the remaining 40 cases the initial dose was two grams followed by doses of one gram every four hours. These differences in dosage seemed to have little effect on the ultimate recovery of the patient. Seventy-four cases had a drop of temperature to within normal limits in 24 hours after receiving the first dose of sulfapyridine. These 74 cases were distributed proportionately between the two methods of initiating therapy. However, in those cases where the disease process had been present for 72 hours or longer the clinical response within 24 hours of beginning therapy was more marked in those cases having the larger initial dose.

There were considerable variations in the length of time the drug was continued after return of the temperature and pulse to normal. In 10 cases the drug was withdrawn in 24 hours after normal temperature and pulse were recorded. Two of these cases had a subsequent recurrence of temperature elevation and had to be again placed on sulfapyridine therapy. In 28 cases the drug was withdrawn in 48 hours after clinical remission of symptoms and in one of these there was recurrence of temperature elevation with subsequent return to sulfapyridine therapy. However, in the 57 cases where the drug was continued for 72 or more hours after remission of symptoms there were no recurrences. These figures give 8 per cent recurrence where the drug was withdrawn in 48 hours after return of temperature and pulse to normal.

The principal toxic manifestation of the drug was severe nausea which occurred in 40 cases and was associated with vomiting in 32 of that number. Cyanosis was observed in six patients, two cases of hematuria were recorded and 11 patients showed a marked drop in the number of red blood corpuscles and in the grams of hemoglobin while on sulfapyridine therapy. In only four instances was the drug discontinued because of toxic symptoms and a satisfactory therapeutic effect was obtained even in these cases.

In this series of 102 cases of uncomplicated sulfapyridine treated pneumonia there were seven deaths giving a mortality rate of 6.8 per cent. Four of these seven deaths occurred in patients over 61 years of age. Six of the patients died within 48 hours of admission and four of them had evidence of generalized lung pathology on X-ray examination. There was one fatal type 3 pneumococcic bacteriemia and two other fatal cases having sputum positive for pneumococci. All of the fatal cases showed clinical evidence of a massive fulminating chest infection and showed absolutely no response to sulfapyridine therapy.

Only three sulfapyridine treated patients developed any significant complications. All of them were empyemas which subsequently were successfully treated by rib resection.

COMMENTS

From our experience in the above 262 cases of uncomplicated pneumonia, we believe that in general hospital practice, the average noncritical case can be justifiably treated with sulfapyridine alone for 24 hours after admission. If marked improvement is not noted at the end of this time, or if the patient's condition on admission is critical, we believe that combined serum-sulfapyridine therapy should be used.

1102 Republic Bldg.

Arterial Changes in Diabetes

Case Report, Monckeberg's Sclerosis

CHARLES A. LaMONT, M.D.

IN view of the fact that since 1900 the span of life has increased approximately from 50 to 60 years and the age of the diabetic at death from 45 to 63 years in the same length of time,[1] the subject of arteriosclerosis is of increasing importance in general medicine. The disease, if it can be termed that, may be simply defined as "the various changes of an abnormal nature which take place in the arteries."[2]

CASE REPORT

This patient,* a dairyman farmer 29 years of age was first seen March 1, 1936. His chief complaint was weakness and inability to do hard work, though he was able to milk and do ordinary chores about the barn. He developed diabetes in 1921 at the age of 14 years, the year insulin was discovered. During his adolescence he worked long hours at hard manual labor where he often suffered extreme fatigue. His diet has never been calculated, never been weighed, rarely measured but did include several eggs daily which have a high cholesterol content. He began insulin in 1924, but the insulin treatment has been intermittent varying from no insulin to 60 units daily. In fact, he has been a severe diabetic for about 19 years. His family history was negative for diabetes.

He was about 40 pounds underweight with edema of the legs, ankles and face, as is frequently seen in insulin patients with unregulated diet. Pupils were equal and active to light and accommodation; eye grounds were normal; he had many carious teeth; no glandular enlargement; chest, clear; heart, no enlargement, no murmurs, rate 110; blood pressure, systolic 90, diastolic 70. Electrocardiogram normal. He had no peripheral pulsation, either palpable or visible in wrists or feet except faintly in left wrist. His radial arteries felt like a string of beads. The liver was palpable about two finger breadths below right costal border. The following reflexes were absent: tendo achilles, patellar, cremasteric. The abdominal reflexes were weak. No sensory disturbances were present. The urine contained about 6 per cent sugar, no acetone. His blood sugar was 300 mg. per 100 cc. His blood cholesterol was 134, blood calcium 11.9. Wassermann, negative.

The extreme rigidity and lack of pulsation of his radial arteries suggested to us an X-ray investigation of these vessels where an amazing condition presented itself which we found on further studies was present throughout his peripheral arterial system, that is, a generalized advanced arterial calcification.

Regarding etiology, MacCallum[3] has said, "arteriosclerosis is one of the diseases difficult to explain because it develops so slowly through the long years of life, during which a great many possible causes have had an opportunity to affect the tissue. Hence every conceivable idea has been expressed or tenaciously maintained regarding the condition and many of them so vague and ill supported that it is wearisome to discuss them. None, however, is clearly demonstrated to have a definite bearing on the etiology of arteriosclerosis and we are quite as ignorant of its underlying causes as were our fathers in the days of Morgagni." In later publications,[4] however, he expresses the hope that experiments with cholesterol will provide definite information on the etiology of arteriosclerosis.

The Author

● Dr. LaMont, Canton, Ohio, is a graduate of Johns Hopkins University School of Medicine, 1908; fellow American College of Physicians; diplomate, American Board of Internal Medicine; physician-in-chief, Aultman Hospital, Canton, Ohio.

It will be recalled that arteries fall into two types:

1. The elastic arteries which comprise the aorta and to a lesser extent the carotids and iliacs whose walls are comprised principally of elastic tissue which serve to make these vessels highly elastic distributing tubes.
2. The muscular arteries comprising the splanchnic and peripheral systems including the arterioles whose medial coat is predominantly smooth muscle, whereby the blood supply can be controlled according to varying local demands.

In other words, the physiological changes in size in the aorta depend on the elastic tissue while the changes in the peripheral arteries are controlled by the smooth muscle in the media.

Arteriosclerosis is classified according to pathology:

1. Atherosclerosis.
2. Mönckeberg's sclerosis.
3. Thrombo-angiitis obliterans or Buerger's disease.
4. Obliterative endarteritis.

In atherosclerosis the characteristic lesion is the familiar atheromatous plaque of the elastic arteries usually first seen on the posterior wall of the aorta surrounding the orifices of the intercostal arteries. In these plaques proliferation of

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Read before the Section on Medicine, Ohio State Medical Association, at the Ninety-Fourth Annual Meeting, Cincinnati, May 14-16, 1940.

*Patient referred by George Wenger, M.D., of Massillon, Ohio.

A word of appreciation is due Dr. Elliott P. Joslin and Dr. Howard Root for their interest in this patient and for their valuable suggestions in the preparation of this paper.

the connective tissue takes place with fatty infiltration and hypertrophy of the intima causing a narrowing of the lumen. Experimentally the feeding of cholesterin to rabbits produces probably the nearest approach to human atherosclerosis.

While atherosclerosis begins in the elastic arteries and later may extend throughout the arterial tree, Mönckeberg's sclerosis is limited to the peripheral or muscular arteries and is characterized by calcification of the medial coat with little or no change in the intima. It is usually ringlike in character. It is usually a condition found in advanced age following years of hard muscular activity.

These two distinct forms of arterial changes are frequently combined. It is still doubtful whether they are different forms of the same disease or whether they have a different etiology. It is evident they are frequently confused.

Experimentally Mönckeberg's[5] sclerosis is produced in animals by entirely different methods than atheroma. Josué produced medial calcification by intravenous injections of adrenalin. It has also been produced by intravenous injection of adrenalin and amyl nitrate combined, by digitalin, nicotine and diphtheria toxin.

The cause of medial fibrosis and the disappearance of the muscle fibers of the media is obscure. There is no evidence of fatty degeneration or necrosis. Recent evidence indicates that according to Bell[6] calcification demonstrable by roentgen rays is nearly always medial calcification except in the aorta. Deposits of calcium begin in the interstitial substance between the muscle fibers. No degenerative changes in the media preliminary to calcification are commonly seen.

The other types of arteriosclerosis have little association with diabetes.

Arteriosclerosis is the chief enemy of the diabetic. In 1930 Warren[7] stated, in his first edition of Pathology of Diabetes that arteriosclerosis showed at autopsy in any diabetic after five years' duration. In his second edition, however, he reported four such cases, that is, diabetes of longer duration than five years, free of arteriosclerosis. Joslin[8] has pointed out that every other diabetic now dies of arteriosclerosis and the rate is rapidly increasing. In the Naunyn era it was 18 per cent, in the Allen 5 per cent, and since insulin it is now over 56 per cent.

The most important reason for this increase is the drop in the death rate from coma and therefore the greater length of life of the diabetic. An interesting fact is the localization of the arterial changes,[9] the heart in 56 per cent, the legs 19 per cent, the brain 12 per cent, the kidneys 3 per cent. The main increase is in the coronaries and the arteries of the legs. Levine[10] states that among the distinct disease entities that are etiologically related to coronary thrombosis, diabetes is second in importance only to previously existing hypertension. Root, Blaud, Gordon and White[11] in a comparison of autopsies of 349 diabetic patients with 3400 nondiabetic patients, showed that coronary occlusion is about four times as frequent in diabetes. It is also an interesting fact that among diabetics dying of coronary thrombosis nearly one-half are females while among nondiabetics only 10 per cent or less are females.

Arterial calcification has often been observed in diabetes. Morrison and Bogan[12] in 1929 reported arterial calcification present in 53 per cent of 324 cases in ages from two to 81 years. In this series advanced calcification was not found under 40 years of age nor any case of gangrene under 40, and no patient under 50 years of age had absent pulsation of the dorsalis pedis arteries. Lues, dental infection and arthritis appeared to play no part in production of arterial calcification. Blood pressure of the diabetic under 35 was usually below normal, after 35 above normal.

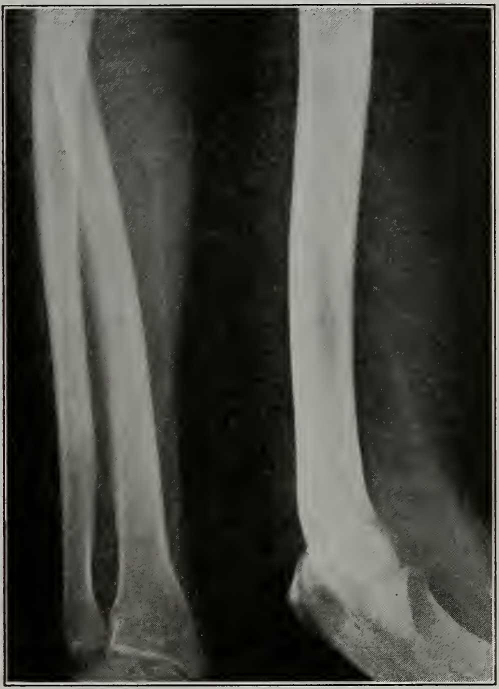

Fig. 1. Showing, left, calcified radial and ulnar arteries and right, the brachial artery.

Shepardson[13] studied 50 cases of diabetes under the age of 40 with a minimum duration of the disease of five years. Roentgenologic evidence of arteriosclerosis was present in 18 or 36 per cent. The youngest to show vascular changes was 11½ years though the changes were not marked.

The most pronounced evidences were found in

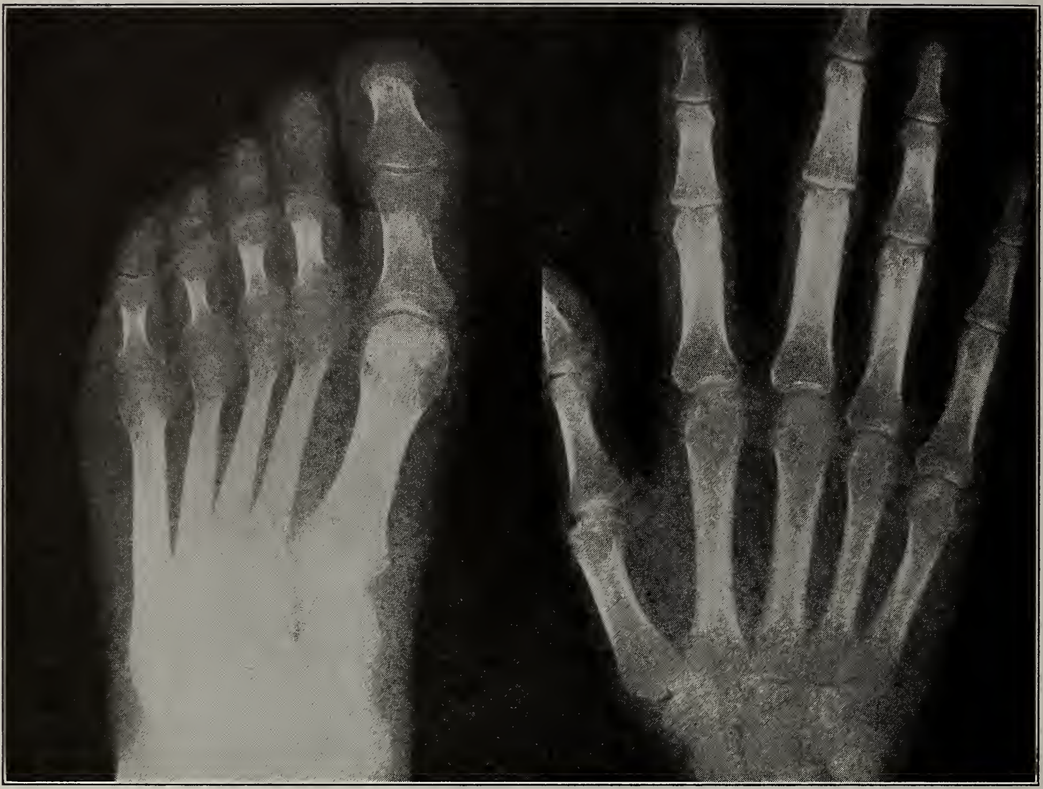

Fig. 2. Showing interosseous and digital arteries of foot and hand.

patients with a tuberculous sinus or pleurisy. The height of the blood sugar was not as accurate an indication as the evidence of impaired fat metabolism. Neither essential hypertension nor cardiovascular renal disease plays an important role in the arteriosclerosis associated with diabetes. Three of the 18 sclerosis cases showed a systolic pressure under 90, and only three were over 130.

Vascular disease then occurs with much greater frequency and a much earlier age in diabetics than non-diabetics. Root and Sharkey[14] have pointed out that among diabetic patients examined at postmortem within a year after the onset of diabetes the amount of arteriosclerosis in the aorta is rather less than in nondiabetics of similar age. Among diabetics who have diabetes for a long period it is very much in excess of that found in nondiabetics indicating that the arteriosclerosis found in diabetics takes place after onset of disease.

Root, White and Marble[15] reported two cases of marked calcification of the arteries and decalcification to the extent that compression fractures of the vertebrae followed, in one with slight injury and one with no injury.

At present no accurate statement can be made as to whether decalcification is more common in diabetics or in nondiabetics. It is well recognized, however, that in diabetic acidosis as well as acidosis due to other causes there is an increased excretion of calcium in the urine and it is usually accepted that when there is no acidosis, the calcium metabolism of the diabetic patients is the same as in nondiabetics. The abnormalities of calcium formation seem to depend on the acidosis and the duration and severity of the diabetes, and to be controllable by its early, adequate and prolonged treatment.

Reduced or absent patellar reflexes were observed by Sevringhaus[16] in 46 per cent of 500 cases. Their entire absence is seen in a small group of cases without lues. In a few cases in young diabetics, acute loss of reflexes have been followed in a few weeks by a return after treatment has been established. There is no correlation between pain and reduced reflexes. The latter is more common in the first four decades while pain in the legs is more common later in life.

Woltham and Wilder[17] have pointed out that autopsy findings in diabetics show that cord degeneration is relatively unimportant. The most important lesion rather is in the nerve trunks and the factor of greatest significance in lesions of the nerves found in diabetics is atherosclerosis.

That disturbed fat metabolism is a prominent factor in arteriosclerosis of the diabetic has been fairly well established by Joslin,[18] Rabinowitch,[19] Gibbs, Bircher and Bloor,[20] White[21] and many others. It would seem then that a high fat diet would predispose to this condition. The tendency in the last decade to increase the carbohydrate from about one gram per kilo body weight to three or four grams should help prevent arterial changes. Freyberg, Newberg and Merrill[22] claim that a controlled diabetic has practically the same blood cholesterol on a high fat diet as on a low fat diet.

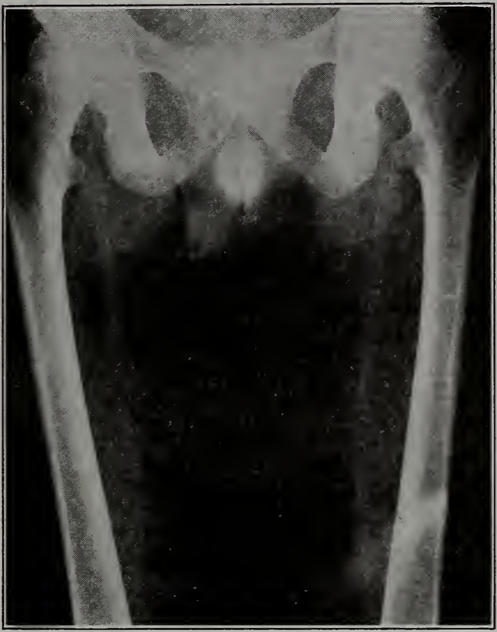

Fig. 3. Showing both femoral, profunda and internal pudic arteries. The aorta and its immediate branches show no calcification.

In the case here reported, the roentgenologic evidence points to Mönckeberg's sclerosis, a disease whose etiology is unknown. At the same time he is a neglected or rather a neglectful diabetic, dating since adolescence, a condition very prone to atheromatous changes in the arteries. It seems to me a significant observation that the calcification is confined exclusively to the peripheral arteries. It is probably a safe guess that his elastic arteries, while not calcified are far from free of sclerosis. It is probable that hard manual labor on the farm during abolescence has caused increased functional strain on his peripheral arteries which has resulted in the calcified muscular layers. In addition to manual labor, I would consider also the following factors, high cholesterol diet, undernutrition with hyperglycemia, varying acidosis and dehydration, all of which took place during a period of growth. Within the past year this patient suffered an extensive infection in the plantar area of his right foot to the extent that the fifth metatarsal bone was infected. No sign of gangrene developed indicating, that in spite of arterial calcification, the circulation continues good.

The patient is living and enjoying good health. Last summer he plowed, dragged and planted a 40-acre field of wheat working from daylight to dark. He now weighs 135 pounds—a gain of 15 pounds since he first came to my attention. His daily insulin dosage is 40 units of protamine zinc and 15 units of solution of zinc-crystals. His teeth are terrible. All his lower teeth are decayed to the gum margin.

For many years I have been looking for roentgenologic evidence of calcified arteries in the legs of my patients with diabetic gangrene. Many of these patients even in advanced ages showed moderate or little X-ray evidence of calcification even with arteries occluded. It is probable that the lack of pulsation in the peripheral arteries in this young man is due to rigidity and not occlusion. This case suggests that diabetic gangrene may not be due to Mönckeberg's sclerosis so easily demonstrable by X-ray, but to atherosclerosis, a fibrosis of the intima of the artery.

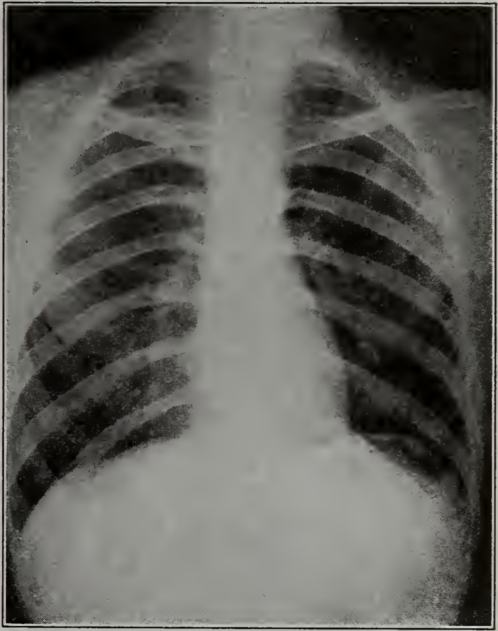

Fig. 4. Six foot plate shows normal heart.

Root,[23] however, states that in diabetic legs studied pathologically after amputation calcification is always present, predominantly in the

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I wish to express my appreciation to Dr. Paul Lecklitner, Aultman Hospital and Dr. Anna Hendrickson for the extensive X-ray studies of this case and the interpretation of the films.

media but also does occur in the intima. As a rule one finds both medial calcification and advanced atherosclerosis.

The facts are fairly well established that:

1. The development of arteriosclerosis is the chief complication of diabetes regardless of age of patient;
2. Disorder of fat metabolism is the chief but not the only cause of arteriosclerosis in the diabetic;
3. Juvenile diabetics who formerly died in a few months, now with insulin live to develop premature arteriosclerosis unless their diabetes is carefully controlled.

Arterial changes in diabetes can be at least definitely postponed by:

1. An exact diet suitable to the age, activity and metabolism of the patient;
2. Proper insulin or protamine dosage;
3. Diabetic education of the patient;
4. Regular follow up of patient.

It is a relatively simple problem to institute a proper diet, to determine proper insulin dosage by blood sugar estimations and urinary examinations and to instruct the patients in calculating diets, administering insulin, examining urine and to teach them facts relative to their disease.

The real difficulty lies in keeping the patient from growing careless with his diet. "The doctor treats the patient, but the patient treats the disease." The treatment, however, runs crosswise to the ordinary conventions of life. Constant daily dietary restrictions are not compatible with the temperament or will power of the average patient or individual. For this reason regular visits to the physician not only for blood sugar estimation but also for instruction, inspiration and encouragement are indispensible.

The treatment of diabetes unfortunately is not spectacular nor dramatic as is the case in surgical cases. On the contrary it is a life time problem and fight.

Recently Joslin[24] said, "Diabetes is a life-long disease because it begins at birth and lasts till death, even though it may be unrecognized at either end. For the doctor this life-long duration of the diabetic carries a lesson. Doctors practice only about 30 years. When a doctor sees a diabetic patient the chances are that his patient will outlive him."

The treatment for diabetes today is probably as correctly standardized as any disease. Relatively poor results are obtained in comparison to possibilities because sooner or later the patients weary of returning for their checkup, they grow lax in their diabetic morals and the insidious, asymptomatic complications of diabetes, especially arteriosclerosis, develop.

This is especially true of the juvenile diabetic who has not reached the age of discretion to follow the discipline of treatment. For this reason diabetics present the greatest problem of all in regard to management. In the pre-insulin era the life expectancy of the juvenile diabetic was two years from onset, and that period was a pitiable existence for them. Today the fact that due to insulin they are living and developing in an apparently normal way, we have a new type of patient whose future is unknown, but who we do know has a tendency to develop arteriosclerosis and arterial calcification.

SUMMARY

A case of adolescent diabetes of long standing with medial sclerosis, Mönckeberg's, is reported with X-ray findings.

A survey of the literature calls attention to increasing association of arteriosclerosis and coronary disease with diabetes.

The point is made that X-ray evidence of peripheral arterial changes is usually of the Mönckeberg type or medial sclerosis. Circulatory damage and artery occlusion is due mainly to atheroma of the artery and is confined primarily to the intima.

The importance of better control of diabetes especially the juvenile cases is emphasized to avoid such arterial changes as here pictured.

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Infected Corneal Ulcers of Recurrent Type

L. E. BROWN, SR., M.D., F.A.C.S.

THIS is a preliminary report and discussion of an old subject, namely recurrent infected ulcers of the cornea, from a new or at least different etiological standpoint. In the cases I have studied to date, they appear to be quite similar in every respect to many other ulcers of the cornea. There is no history of any injury—simply the usual symptoms complained of by the patient with a corneal ulcer—with which you are familiar.

The ulcer is cared for in the usual manner, by cleansing and cauterizing with some **one** of the numerous agents used for that purpose. The ulcer apparently completely heals, all symptoms accompanying it disappear and the patient is discharged, only to reappear in a very short time with a similar, if not worse condition than on his first visit.

After repeated attacks the patient begins to wonder, and rightly so, if we are familiar with this condition and just what we are going to do about it.

It is at this point that we begin to search for the cause. Blood counts and pressure are taken—urinalysis — diet — rest — lighting conditions — when last refracted — over indulgence in the use of tobacco and alcohol — any infected teeth, etc., and no tangible information is obtained. Smears and cultures are made to ascertain, if we can, the offending organisms, and a careful search is made to determine **if possible**, the source of supply.

In my humble opinion, based on a limited number of cases thus far studied, the infected upper respiratory tract **is responsible**, especially where there is an involvement of the sinuses, with much nose blowing and severe spasms of sneezing and coughing. Naturally the infection can and occasionally does migrate through the tearduct—sac, etc., up to the culdesac of the eye, this **is rare**. However, with explosive sneezing, and coughing, or forceful nose blowing, which occurs in these cases, the infection **can be and frequently is continuously** forced through the lacrimal tract to the eye culdesac and acts as an unceasing supply of infection to produce and cause the frequent recurrence of corneal ulcers—appearing in crops, so to speak.

This I have proved by smears and cultures from the ulcers and the eye culdesac and **then** finding the same type of infection in the nose or sinus discharge. It is only after this source of supply of infection has been found and corrected that I have been able to control, accompanied by the proper local treatment, many of these cases which I am sure have proved just as difficult for you as they have been for me, to clear and have them remain free from trouble.

The Author

● Dr. Brown, Akron, Ohio, is a graduate of Baltimore Medical College, 1903; fellow American Academy of Ophthalmology and Otolaryngology; American Laryngological, Rhinological and Otological Society.

Diagnosis of these cases is quite obvious. However this **causal factor**, which enters into the etiology, is the point which will cause some difficulty in locating and eliminating it if not given proper consideration.

The prognosis thus far in the few cases which I have had, have been good.

The treatment I have instituted in these cases has been one of the recognized forms for the care of corneal ulcers, namely, the usual irrigation of the eye for cleansing purposes, cauterization of the ulcer by any one of the numerous agents used for this purpose followed by the usual after-care and home treatment that is usually prescribed for this type of case. In addition, I have paid a great deal of attention to the care of the nose, throat, and sinus involvement, regardless of the fact that it may appear upon examination of these areas, to be of nominal consequence. Also in my experience, I have found that thorough irrigation of the lacrimal tract is of the **greatest importance**. My reason for making such positive statements is that, as stated above I am quite convinced that the nose, sinuses, and throat are a definite source of supply of infection in the production of many of these ulcers and possibly many of the acute infections of the eyes, which have given us a great deal of concern in the past.

And certainly if we persist in treating the corneal ulcer alone, with no attention having been given to the above mentioned sources of supply of infection, we will continue to experience difficulty in healing these ulcers and having them remain **well** over a long period of time.

In conclusion let me caution you once more, to pay particular attention to the upper respiratory tract, namely, the nose, sinuses, and throat —active treatment of same—and especial attention to irrigation of the lacrimal tract, in your treatment of infected corneal ulcers of recurrent type.

Read before Section on Eye, Ear, Nose and Throat, Ohio State Medical Association, at a luncheon held during Ninety-Fourth Annual Meeting, Cincinnati, May 14-16, 1940.

Newer Concepts in the Treatment of Glaucoma

L. V. JOHNSON, M.D.

IN November, 1938, Dr. Samuel Clarke[1] presented data to the New England Ophthalmological Society concerning the clinical use of two drugs, not previously applied, for the relief of tension in glaucoma. These drugs are prostigmine[2] and mecholyl,[3] both of which are strongly miotic and have the general effect of stimulation of the parasympathetic nervous system. This paper summarizes the use of these drugs upon 100 patients in the clinic of the Massachusetts Eye and Ear Infirmary, including acute congestive glaucoma, aphakia, secondary glaucoma (traumatic, discissions, blocked pupil, etc.), chronic simple glaucoma, and buphthalmos.

In presenting these remarks, I have no intention of adding to the scientific data above-mentioned or of adding to his large series of cases. I will but again call to the attention of this meeting the above work, and discuss the pharmacology and physiology of the commonly used miotics.

The older concept of balance between sympathetic and parasympathetic stimulation must be modified so that one considers this stimulation to result in the production of chemical substances produced at the end organs. Stimulation of the sympathetic nerves thus results in the production of sympathin or substances similar to adrenin at the synapse, which then stimulates the reacting cell in a smooth, continuous manner. Stimulation of the parasympathetic nerves results in the formation of acetylcholin, which stimulates its reacting cells in a similar manner. Stated chemically then, the type of reaction depends upon the relative influence of sympathin or acetylcholin. In addition there are esterases which are produced either by the reacting cells or by tissue in general. It is known, for instance, that an enzyme cholin-esterase is present, which hydrolyzes acetlycholin into acetic acid and cholin, neither of which are active as biological stimuli, and thus the effect of the acetylcholin is slowly terminated. No enzyme is known to hydrolyze sympathin, but this will probably follow the isolation of sympathin. Examination of Figure 1 will clearly illustrate this physiology. Parasympathetic neuron (1) arises in the muscles and terminates in the ciliary ganglion. The second neuron starts in the ciliary ganglion and terminates in the ciliary body. The first sympathetic neuron terminates in the cervical synapse; the second in the ciliary body.

The Author

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The time alloted for this paper does not permit discussion of formation of aqueous, but the results of stimulation of these nerves may be easily seen by example of their effects upon the ciliary muscle and accommodation. Pilocarpine, eserine, mecholyl, and prostigmine all tend to increase accommodation, most easily noticed by presbyopic patients. Atropin and benzedrine tend to decrease accommodation.

Adrenalin (levo-rotatory), glaukosan (dextrorotary adrenalin and which has no tendency to elevate blood pressure) and benzedrine probably reduce the intra-ocular tension only when used in sufficiently concentrated solutions that the secondary phase of vasodilation is very marked, and result in the flushing out of substances such as cholin-esterase. These drugs should never be used in acute or hemorrhagic glaucoma and they probably find their best use in secondary glaucoma when used as a subconjunctival injection of 1:1000 adrenalin combined with a small amount of 4 per cent cocaine, for not only are the adhesions broken by the powerful stimulus to the dilator fibers, but the tension may remain lowered for as long as 36 hours during the stage of secondary vasodilatation. The results of repeated instillation are uncertain.

Acetylcholin is the chemical substance produced in the synapse following normal stimulation of the parasympathetic nerves. As pointed out, its action is brief, since its action depends upon the absence of destruction by acetylcholine-esterase. Since the amount of choline-esterase present is increased following injury or inflammation, this drug alone is less efficient for secondary glaucoma following extracapsular extraction, or other injury to the eye. It is most effective in non-inflammatory glaucoma. Mecholyl (acetyl-beta-methylcholine chloride) is somewhat longer acting than acetylcholine, but the effects of its use are very similar. I feel that the best use of mecholyl is by retrobulbar injection of

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Read before a luncheon meeting of the Section on Eye, Ear, Nose and Throat, Ohio State Medical Association, during the Ninety-fourth Annual Meeting, Cincinnati, May 14-16, 1940.

0.025 gm. in 2 per cent procaine, at the time of operation, to lower the tension. Clarke cautions that this should not be used unless there is at hand the opportunity of injecting 1/100 grain of atropin sulfate, because, "asthmatic attacks and even death can be produced in patients subject to asthma or other pronounced allergy." He states that, "the general effect comes on within two minutes and passes off after 20," minutes following the injection. Atropin may "instantly abolish" the effects of mecholyl.

Prostigmine and eserine inhibit the action of cholin-esterase. Clarke states that prostigmine "differs from eserine in that it does not cause so much unpleasantness to the patient, has a stronger miotic action and will not deteriorate so quickly as eserine."

Pilocarpine probably acts directly upon the cells. It has the advantage over eserine in that there are few systemic effects when used in strong concentration (even up to 4 per cent for a few instillations). The prolonged action, the lack of untoward systemic effects, the relative freedom of tolerance when used in solutions up to 2 per cent, and its low cost make it still the most desirable drug for prolonged use such as in chronic simple glaucoma. It is most satisfactorily used for those patients who have relatively dilated pupils and anterior chambers that are not too shallow.

CHART 1

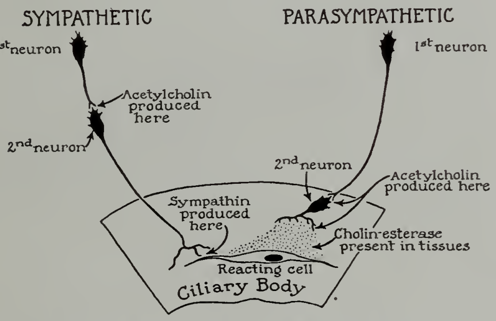

Chart 1. Balance between sympathetic and parasympathetic nerves and esterase. (Myerson)

The surgical procedures most generally used are: Wide basal iridectomy for acute glaucoma with relatively deep anterior chamber; trephine for chronic simple or acute exacerbations accompanying very shallow anterior chamber, in which cases a period of marked hypotony may be followed by another exacerbation in spite of a good iridectomy or trephine. Iris inclusion operations appear to be generally losing in popularity. The trephine should be well forward and caution should be taken to insure that a good pad of Tenon's capsule covers the trephine opening.

Paracentesis with a knife in the corneal limbus, or a keratome incision, well into the angle of the anterior chamber, are very satisfactory for the temporary control of acute uveitis with secondary glaucoma. Probably the greatest value results from the flushing out of the fibrin and debris and the prevention of occlusion of the angle of filtration. An increased antibody titre also follows.

CHART 2

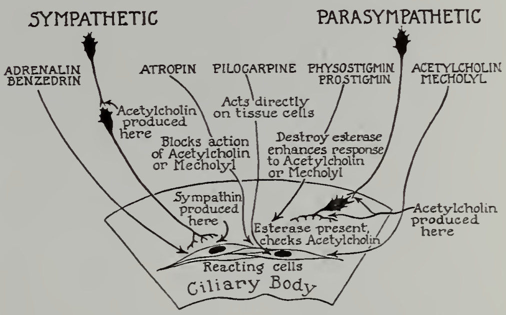
SYMPATHETIC
PARASYMPATHETIC
ADRENALIN
BENZEDRIN
ATROPIN
PILOCARPINE
PHYSOSTIGMIN
PROSTIGMIN
ACETYLCHOLIN
MECHOLYL
Acetylcholin produced here
Acts directly on tissue cells
Blocks action of Acetylcholin or Mecholyl
Destroy esterase enhances response to Acetylcholin or Mecholyl
Sympathin produced here
Esterase present, checks Acetylcholin
Acetylcholin produced here
Reacting cells
Ciliary Body

Chart 2. Working hypothesis of human pharmacology. (Modified after Myerson)

Transfixation of the iris is usually sufficient for iris bombé or postoperative iris cyst, although iridectomy may be required.

May I again call attention to the splendid report by Dr. Clarke and advise that all who are interested in this phase of glaucoma re-read his paper.

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2. Prostigmine is sold by Hoffmann LaRoche, Inc.
3. Mecholyl is sold by Merck and Co.

Black Widow Spider Bite

The treatment consists locally of the application of antiseptics without any surgical interference. The general treatment consists of opiates for the immediate relief of pain; the intravenous injection of 10 cc. of a 10 per cent solution of calcium gluconate or magnesium sulphate, repeated if necessary, and hot baths for the duration of one-half to one hour.

The frequency with which the black widow is found in this vicinity varies with one's interest. During a period of less than three weeks more than 20 have been collected. The number of cases of arachnidism appears small considering the numbers and distribution of the spider.—F. C. Hodges, M.D., Huntington; W. Va. Med. Jour., Vol. 36, No. 12, December, 1940.

Teach the tuberculous patient to regard symptoms as red and green signal lights and not something to worry about.

Polyps of the Lower Sigmoid and Rectum

W. W. GREEN, M.D.

THE increase in the number of papers dealing with polyps of the large bowel is gradually bringing to this subject the recognition it deserves. These tumors have been dealt with in their various aspects, each treatise reflecting the phase in which the writer was most interested. It has been established that 75 per cent of the polyps of the large bowel occur within the reach of the sigmoidoscope. These are the tumors that can be palpated or visualized by direct examination and are readily accessible for treatment. The pre-operative diagnosis of the 25 per cent in the remainder of the colon rests chiefly upon the limitation of roentgenologic findings. For this reason, a study based upon the polyps of the lower sigmoid and rectum gives the clearest picture of the condition as it is encountered clinically. As far as can be determined only one analysis has been made from this point of view and that study (Buie & Brust[1]) was limited to solitary adenomas.

The term polyp, as used here, may be defined as any sessile or pedunculated tumor arising from the mucosa of the lower sigmoid or rectum. Obviously, this does not include the fibrous polyps of the anal canal, the cases of congenital multiple polyposis, and the grossly malignant lesions that have lost their polypoid architecture.

INCIDENCE

This study is based upon an analysis of 70 consecutive cases of polyps seen in a practice limited to proctology. This number was chosen because it represents a group of private patients upon whom there were complete records. The usual procedure of reviewing an arbitrary number of cases was reversed. Six hundred and forty sigmoidoscopic examinations were made over the period in which these 70 cases of polyps occurred. Although additional cases were seen during this time, a sigmoidoscopic examination was prevented by the presence of feces, or because of acute pain. (In view of the findings to be described later, this can not be used as an excuse and the examination should have been performed at a later date). The incidence of these polyps was 10.8 per cent, a figure much higher than is generally accepted. Although Swinton and Warren[2] stated: " . . . we believe that the incidence of polyps of the rectum and colon is much higher than has been recognized . . . ", only additional analyses of a large series can establish the accuracy of the percentage found here. It is our belief that more of these lesions will be discovered as soon as the medical profession becomes better aware of their existence.

The Author

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LOCATION

In this series, 83 per cent of the polyps were single and in only 17 per cent of the cases did two or more polyps occur. Lawrence,[3] in a study of 7,000 colons at autopsy, found that two or more polyps occurred in half of the cases. The rather high percentage of single polyps here is explained by the fact that only the terminal bowel was included. Undoubtedly, some of these cases had an undiagnosed polyp above the reach of the sigmoidoscope. In 45 patients (64 per cent) one or more polyps were below the rectosigmoid junction. Although many of these were too small to be palpable, at least the majority were within the reach of the examining finger.

PATHOLOGY

Every type of polyp was encountered in this series. The tumors varied from the two mm. sessile adenomas to the large, pedunculated, villous papillomas that filled the greater part of the ampulla. Included were the typical benign adenomas found in young children as well as polyps which showed areas of malignant change. Inasmuch as the microscopic studies revealed no structures outside the usual patterns, a detailed discussion of the pathology is omitted. The interested reader is referred to pathological descriptions that can be found in treatises listed in the bibliography. (Swinton and Warren[2]), (David[4]), (Lynch and Felson[5]), (Saint[6]), (Bacon[7]).

SYMPTOMATOLOGY

Some of these polyps cause no symptoms to give evidence of their presence. In general, the number and severity of the symptoms is in direct proportion to the increasing size of the tumor. The most characteristic symptoms include tenesmus; the frequent evacuation of small amounts of blood-tinged mucous; low backache or pain referred throughout the pelvis or down the posterior aspect of the thighs; cramp-like

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Read before the Section on Surgery, Ohio State Medical Association, at the Ninety-Fourth Annual Meeting, Cincinnati, Ohio, May 14-16, 1940.

pains in the lower left abdominal quadrant, frequently preceding defecation; associated urinary disturbances as frequency, tenesmus, dysuria. Less than half the cases (48.5 per cent) in this series presented one or more of the above symptoms. One of the most enlightening findings in this entire study is the fact that 51.5 per cent of the polyps were discovered upon routine sigmoidoscopic examination. This means that, although the tumors may have been responsible for certain symptoms, such symptoms were accounted for or overshadowed by more obvious anal pathology. These findings emphasize again the importance of the routine sigmoidoscopic examination.

DIAGNOSTIC X-RAY

The subject of diagnosis should not be passed over without some mention being made of the use of the X-ray. Obviously we are dependent upon roentgenographic findings for the diagnosis of tumors above the reach of the 'scope. It has been our experience, however, that an X-ray examination often fails to reveal polyps readily seen through the sigmoidoscope. Small tumors are usually obscured by the column of barium that fills the lumen of the bowel during the ordinary examination. The most dependable methods are the use of the contrast technique with air insufflation or the employment of Umbrathor as the opaque media. Such an examination is time-consuming and is often not available in the smaller hospitals. Entirely too much reliance is placed upon a negative X-ray report. Whenever the presence of a polyp is suspected above the reach of the sigmoidoscope, the negative findings of the ordinary barium enema should be disregarded and a request made for the more dependable type of examination.

POLYPS IN CHILDREN

Polyps of the terminal bowel are not uncommon lesions of childhood (David[4]), (Daniels[8]). A review of the recent pediatric literature leads one to believe that it must be a rare occurrence in a practice limited to children (Diamond[9]), (Bloom[10]). Diamond[9] reports a case and states that Bokay found 25 cases among the records of 58,970 children and Kronenburg found only four cases in 120,000 records. In this series, 11 cases (15 per cent) occurred in children ranging in age from 16 months to 12 years; none of the 70 cases occurred in individuals between the ages of 12 and 22 years. Although there was a wide variation in the clinical aspect of polyps as seen in adults, rather uniform characteristics were encountered in children. These tumors were large, all but one measuring over one cm. in diameter. Because of their size, most were pedunculated and ulcerated. No papillomas were found in this group and none had undergone malignant change. There was no reference in the literature pertaining to malignant degeneration in the polyps of children except in cases of congenital multiple polyposis.

RELATION TO MALIGNANCY

The tendency of these polyps to undergo malignant change has been clearly demonstrated by several writers. The reader interested in this phase of the subject is referred to papers by Swinton and Warren,[2] Lawrence,[3] David,[4] Martin,[11] Yeomans[12] et al. The discussion here is limited to malignancy as it occurred in this series. Ten polyps (14 per cent) showed carcinomatous change—this number did not include the "pre-malignant" or questionable cases. The malignant cells occurred in various areas; in only three of the ten cases was there no invasion of the basement membrane. Since the choice of treatment depends upon the question of whether or not the base is involved, the biopsy should be taken from this area. In other words, the biopsy specimen should consist of the entire tumor whenever possible. If the base has been invaded by the malignant cells, a radical resection should be performed. The earlier the change is discovered the more radical should be the procedure. If, after excision of the tumor, it is found that the malignancy is limited to the periphery, the case should be carefully watched. In the three such cases in this series there has been no recurrence. Not enough time has elapsed to place any of these in the category of five-year cures. Radon seeds can be used in this type if the site of removal is accessible (Binkley[13]).

TREATMENT

Although approximately only 15 per cent of these polyps become malignant, there is no way of determining which ones will undergo such a change. For this reason, all should be treated as potentially malignant tumors and be either removed or destroyed. Of this series, the polyps in 47 cases (67 per cent) were removed and examined under the microscope; 14 polyps (20 per cent) were fulgurated in situ and nine patients (13 per cent) did not return for treatment. The limitations placed upon this paper prevent any detailed description of the technic of removing the polyps through the operating sigmoidoscope. Excision with the coagulating snare, followed by fulguration of the base, is the most satisfactory form of treatment. This method is applicable to pedunculated growths of any size. In the event that a villous papilloma is too large to be included in the loop at one time, it may be removed piece-meal. Destruction in situ by the coagulating current should be reserved for sessile growths too small to be grasped with forceps. (This method should not be confused with the type of electro-coagulation advocated in the treatment of rectal carcinoma). There is little or no sensitivity of the polyp itself. For this reason, the choice of anesthetic should be determined by the size of the instrument and by the difficulty anticipated in the removal of the tumor. Unless the growth is large, hospitalization is unnecessary if the polyp is below the peritoneal reflection. The possibility of perforation or hemorrhage requires hospitalization whenever the tumor is at or above the rectosigmoid junction. There were no complications of any kind in the 61 cases treated in this series as well as in more than 20 additional cases not included in this group. (In the interval between the reading of this paper and its publication, non-fatal perforation with localized peritonitis complicated one case).

Many surgeons advocate the abdominal approach for removal of polyps at or above the rectosigmoid (Swinton and Warren[2]), (David[4]). Definite advantages can be found in excision through the operating sigmoidoscope (Gorsch[14]), (Hayes and Burr[15]). Most of these are obvious, the chief advantage being the lowered mortality and morbidity resulting from eliminating the necessity for entering the abdomen and opening the bowel. With the widespread use of this technique, the abdominal route for the removal of these polyps should become as outmoded for general use as has the suprapubic approach in the treatment of the hypertrophied prostate.

RECURRENCE

As in any other potentially malignant lesion, a careful follow-up should be carried out according to definite schedule. Recurrence of the original growth was noted in three of the 61 cases treated. The character of these recurrences is best illustrated by a brief report of each case.

Case I: A small benign adenoma of the sigmoid was removed by merely twisting the pedicle. The subsequent small sessile growth seen eight months later was fulgurated and had not recurred at examination one year later.

Case II: A large benign papilloma was removed from the rectosigmoid in 1935. There have been several recurrences, some of which were fulgurated and others excised. In every instance of removal, the tissue has been examined by two or more pathologists and no malignant transformation has been detected. This patient refuses to submit to a radical resection unless malignant changes can be demonstrated.

Case III: In 1933 a large pedunculated adenoma was removed from the lower rectal ampulla. On two subsequent occasions, the recurrent tissue was excised and the base fulgurated; the tissue was reported as benign each time. In June, 1936, the presence of malignancy was noted for the first time. The lesion was excised and radon seeds were inserted at the base by Dr. W. H. Meffley. There has been no recurrence since that time.

SUMMARY

These polyps occur more frequently than is generally recognized. The 70 consecutive cases analyzed here constituted 10.8 per cent of the total number of patients sigmoidoscoped.

In over half the cases there were either no symptoms at all or such symptoms as were overshadowed by associated rectal or anal pathology.

If the physician remains aware of the polyp as a diagnostic possibility, more will be found. All these lesions were diagnosed by the examining finger or by the use of the sigmoidoscope.

It is unwise to place too much dependence upon negative X-ray findings. Many of these polyps were too small to be found under the most favorable roentgenologic conditions.

A definite relationship exists between the benign and malignant tumors of this area. Although only 14 per cent showed malignant change, all should be treated as potentially malignant lesions.

These polyps are accessible for removal or destruction through the operating sigmoidoscope. With the general acceptance of this technique the more formidable abdominal approach should seldom be necessary.

301 Professional Bldg.

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The death rate from tuberculosis for the entire United States for 1938 was 48.6 per 100,000 population which is 9.3 per cent below that of 1937 and the greatest single annual decline in three decades, except for the phenomenal fall in the death rate just after the war in 1918. This figure was obtained by direct correspondence with health officers of various states.—J. S. Whitney, Amer. Rev. of Tuber., Aug., 1939.

Treatment of Hemorrhagic Disease of the New Born

W. R. BARNEY, M.D.

The Author

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THE term "Hemorrhagic Disease of the New Born" is applied to a condition occurring during the early life of the infant. It is purely a descriptive term, but is the most satisfactory one we have until a definite cause of the disease is known. Being a comparatively rare disease it was only encountered 41 times in the last ten years in our clinic, an incidence of one in 475 cases, while Capon at the University of Liverpool reports an incidence of one in 405. Nevertheless, it is quite important, as its onset is usually sudden in apparently healthy infants, and unless prompt and efficient treatment is instituted at the earliest possible moment, many deaths occur, or the infant's future is impaired by disabling lesions, especially true when the brain or some vital organ is involved.

True it is, that some of these cases recover without treatment, when the hemorrhage is mild, or with the intramuscular injection of blood, but I have never been convinced that the latter procedure had any effect in retarding the progress of this disease, and our cases seem to substantiate this view.

When the hemorrhage does occur, we have no criteria to determine how severe the process will be, or what organ will be involved in the hemorrhagic outburst. Unless one has observed a number of these cases with the end results, he is prone to procrastinate as regards treatment, and it is this state of mind which leads to disaster in many cases.

ETIOLOGY AND DIAGNOSIS

Perusal of the literature gives little information regarding the etiology as many theories and findings are reported by investigators whose ability in blood pathology is respected, but vary in their final interpretation.

To mention a few, makes us realize how far from the true cause we are at this time, and the need for more investigation of these cases.

Whipple in two cases found prothrombin altogether or almost entirely absent, as did Gelston in one case. Schloss and Comiskey found thrombin lacking in one, and fibrinogen in another, while Kugelmass reports two cases with the latter element lacking. Brennerman after studying two cases, believes the failure of blood platelets to disintegrate during the first four days of life to be a causative factor, but offers no explanation for this dysfunction.

Infection has been advanced as an inciting agent by a number of investigators, most notably Klebs, who isolated an organism which he designated "Monas hemorrhagicum" as a possible cause, but this finding was not in keeping with the results of other investigators.

Dietary factors have been cited as a contributing element, notably by Moore and Brodie in 1937, who reported a case in which the mother's diet was deficient in Vitamin B. The parent suffered a severe postpartum hemorrhage, and the infant, an apparently healthy 7½-pound child, had a severe urinary tract hemorrhage on the third day, dying on the fifth day, despite large intramuscular injections of blood. Postmortem examination revealed blood in the peritoneal cavity, renal, adrenal, and submucous hemorrhages in the bladder. Their experiments with rats on a Vitamin B deficiency diet showed the offspring to have a hemorrhagic tendency, many dying, and the parents exhibiting postpartum bleeding, a circumstance not occurring in normal rats. Control animals with normal diet showed no such abnormalities. A number of men lean kindly toward this theory, citing the decrease in this condition in the upper social strata, where the vitamin intake is prone to be adequate. I must say that we are not seeing as many cases in our private patients as we did a number of years ago, when the vtiamin intake was not stressed.

Recent work by Waddell and Guerry of the University of Virginia with Vitamin K, reported in the Journal of A.M.A., June 3, 1939, offers a very attractive field although no bleeding cases were reported, they showed prothrombin and blood clotting time could be reduced or maintained at a standard level with Vitamin K, whereas normally both are variable in the early days of life. Two cases are reported with high prothrombin and blood clotting levels which were

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Submitted August 12, 1940.

TABLE I

Case #	Para	Sex	Wt-Gm	Labor	Hemorrhage	Treatment	Results	Remarks
44-336	1	M	3070	Low forceps 10-25-38—10:10 p.m. Mild toxemia	+Melena—10-26-38 +Hematemesis 6 p.m. Icterus	None	D-3:45 a.m. 10-28-38	Poor nursing preceding
48-859	2	M	3090	V. Bag Fr. Breech 13 H. labor 8-15-38	8-15-38 Hematemesis 9:20 a.m.	Intraven. Bl. 80cc	D-4 p.m. 8-15-38 4 p.m.	Blood given when in extremis
43-447	12	M	2180	Premature Sep. Plac. full term? 6-18-38—Caes.	Nasal	None	D-6-18-38	PM- Hem. in subarachnoid space, lungs, epicardium, stomach & intest.
43-125	1	F	3570	Pod. Version 5-4-39 11:52 a.m.—R.O.P.	Umbil. Cephala Hematoma 5-7-38 2 a.m.	60cc I.V. Bl. 5-7-38 4 p.m.	R-	
42-178	1	F	2660	Midforceps 3-7-38—10:42 a.m.	Hematemesis 10 a.m.—3-8-38	100cc I.V. Bl. 3-9-38 1 a.m.	R-	Pale & in shock when seen
45-404	1	M	4060	Low forceps 4-4-39—2:20 a.m.	Nasal 4-5-39—6 p.m. Umbilical 4-6-39 Hemoptysis 11 a.m.	75cc I.V. Bl. 4-6-39 11:45 a.m.	R-	
42-695	1	M	3080	Low forceps 3-5-38—3:15 a.m. Mild toxemia	Hemoptysis 3-5-38 6:15 a.m.	Bl. Tr. 3-7-38 100cc 3:40 p.m.	D-3-7-38 3:40 p.m.	Coag. T. 15 M Bl. T-1Hr. plus Trans. 1½ days after diag. in extremis
42-590	1	M	3570	Low forceps cord 2X Neck 2-17-38	Hemoptysis 2-21-38	15cc Bl. I. M.	R-	
42-109	2	M	4750	V. Bag Induction L. forceps 12-6-37		S. B.	D-	PM-Bl. in peritoneal Cav.
41-705	1	F	2660	Low forceps 10-3-37	Hemoptysis 2Hr P.P. Melena 12 Hrs.	Saline Infusions	D- 10th day	Coag. T. 15M. Bl. T.10+
44-957	1	M	2930	Low forceps 1-28-39	Hemoptysis 1-29-39	60cc Bl. Saline	R-	Coag. T. 15 M Bl. T. 10 M
41-222	1	M	3695	Forceps 7-19-37—12:12 a.m.	Hemorrhage R. testicle	12cc Bl. I. M.	D- 12H p.p.	PM-200cc Bl. in peritoneal cav. Hem. rt. Testicle tentorial tear with bl. above & below. Both ques. CT-6½M-Bl.T.1M
40-832	4	F	3290	Low forceps 2-4-37—4:26 a.m. Scanzoni	Melena 12 days	None	D- 12th day	PM-Massive Hem. rt. adrenal Br. pneumonia
40-670	1	M	3270	Low forceps 2-4-37—4:26 a.m.	Melena 9 days	10cc I.M. Bl. 9th day	D-	
39-027	1	F	4030	Low forceps 7-8-36—12:22 p.m.	Melena 6 Hrs.		D- 12 Hr.	PM-Hen. Perit cav. 130cc retroperitoneal rt. adrenal
38-605	1	M	2650	Low forceps 4-28-39—6:50 p.m.	Hemoptysis 12 Hr. Melena 5-1-36	18cc Bl. I.M. 4-30-36	R-	Melena persisted for 3 days
38-268	1	M	3830	Pod. version 4 R.O.P. Long Labor	Hematemesis 6 Hr. Skin creases bleed. 2½ days plus	200cc. I.V. 3rd day	R-	
38-227	1	F	3430	Midforceps Scanzoni 4:30 p.m. 2-21-36	Hematemesis 15 Hr.	20cc Bl. I.M. 2-24-36	D- 2-24-36 5:50 p.m.	PM-Hem. Liver rt.Kidney, spleen & G.I. tract
38-074	1	F	2230	Low forceps 1-27-36 11:30 a.m.	Hematemesis 3:45 a.m. 1-28-36 Melena 1-29-36	100cc I.V. 1-28-36 10 a.m.	R-	
37-969	2	M	3400	Midforceps Scanzoni 12:14 p.m. 1-8-36	Hematemesis 2 p.m. 1-9-36 Melena 1-11-36	100cc Bl. I.V. 1-12-36	R- R	BT-2 M. CT-6 M. Pale & Listless
37-043	1	F	1680	Spont. 12:50 p.m. 7-25-35 Sev. Tox.	Hematemesis 12 a.m. 7-27-35		D-	
36-507	1	M		Low forceps	Hematemesis 4:40 p.m. 5-2-35—5-3-35	110cc I.V. 9:30 p.m. 5-3-35	R-	2 Yrs. Later normal. Had rt. arm & leg twitch
35-846	1	M	3500	V. Bag Pod. version long lab.	Hematemesis 1-5-35 Melena hematuria	8 cc Bl.	R-	
35-242	1	M	3130	Low forceps 10:18 p.m.—9-13-34	Melena 9-22-34	Refused	R-	Cl. T.-4½ M Bl. T.-2 M Colitis?
33-904	1	F	3130	Pod. version R.O.P. 1-19-34 1:51 p.m.	S.C. hem. on buttock & lt. arm 6 p.m. 1-22-34 Jaundiced	40 cc I.V. Bl. 1-22-34	R-	
34-193	1	F	2930	Low F. 6:35 p.m. 3-11-34 possible mongolism	Hematemesis 6 p.m. Melena 3-12-34 No impr. Hem. more severe following bl. trans.	65 cc Bl. I.V. 9 p.m. 3-12-34	D- 11:15 a.m. 3-14-34	Bl. not grouped. Cause of death?

TABLE I—(Continued)

Case #	Para	Sex	Wt-Gm	Labor	Hemorrhage	Treatment	Results	Remarks
33-920	1	F	3010	Low forceps 5:13 a.m.—1-22-34	Hematemesis 1-22-34 1 Hr. p.p.	40 cc Bl. I.V. 1-24-34	R-	Jaundice 2 D. p.p.—shock
32-998	1	F	3650	Pod. V. R.O.P. 7-24-33—2:40 p.m.	Cord 7-26-33—12 a.m. Hematemesis 7-28-33 9:30 a.m.	25 cc I.M. Bl. 7-29-33 5 p.m.	D- 7-30-33 2 a.m.	
31-234	1	M	3410	Caes. 10 Hr. L. 9-16-33—8:44 p.m.	Melena 6 p.m. 9-26-33—6 p.m.	30 cc I.V. Bl. 9-26-33 10 p.m. 60 cc 9-28-33 9 p.m.	R-	CT-7 M. BT-2½ M. Not enough bl. first trans.
30-398	1	M	2710	Low F. 12:15 p.m. 5-3-32	Bled from clipped tongue 5-3-32—6 a.m.	60 cc I.V. Bl.	R-	C.T.-5½M B.T.-3M Local astring. No relief.
31-155	1	M	3470	Low F. 5:22 a.m. 9-3-32 Resuscitate 18 Hr. labor	Hematemesis 6 a.m. 9-9-32	17 cc I.M. Bl. 2:20 a.m. 9-10-32	D-	
26-270	2	M		Spont. 1:25 a.m. 8-5-30	Hematemesis 8-5-30—4:30 p.m. Melena 10 p.m.	1cc Fibrog. 8-5-30 5:55 p.m.	D- 8-6-30 9:15 p.m.	PM-Multi. Hem. lungs, cereb. hem. rt. occ. reg. CT-8½ M BT-4½ M
26-846	1	M	2390 1 mo. P.	Low F. 7:15 a.m. 10-28-30	Melena 5 a.m. 10-31-30	18 cc BL I.M. 10-31-30 6:45 a.m.	D- 5:45 a.m. 10-31-30	CT-4 M BT-3 M
27-727	4	F	3660	Scan. R.O.P. No repair	Melena 3-4-31 5 a.m.	100 cc I.V. Bl. 3-4-37 9 a.m.	R-	Sudden Exsang- uination
28-042	2	F	3160	Spont. 4-9-31	Melena 4-13-31	50 cc I.V. Bl. 4-13-31	R-	Shocked when brought in.
29-061	1	F	2250 1 mo. P.	Midf. 9:30 a.m. 9-11-31	Hematemesis 9-11-31—4 p.m. Melena 9-12-31—2 a.m.	50 cc I.V. Bl. 9-12-31 12 a.m.	R-	CT-5 M. BT-11 M.
29-656	1	F	2880	Pod. V. L.O.P. 12-29-31—7:12 p.m.	Hematemesis 12-30-31 Melena 12-31-31 10 a.m.	80 cc I.V. Bl. Father 5 a.m. 12-31-31 80 cc Mother 1-1-32—3 a.m.	R-	Father's Bl. no effect-Bl. mother caused sudden cessation
24-737	1	M	3430	Low forceps 1-11-30	Hematuria severe 1-12-30—7 a.m.	Fibr. 1-12-30 100 cc I.V. Bl. 1-14-30	R-	Fibrogen had no effect.
25-363	1	F	2310	Pod. V. R.O.P. 4-6-30—6:08 a.m.	Hematemesis 8 a.m. 4-8-30	75 cc I.V. Bl. 4-9-30—10 a.m.	R-	Bl. & CT normal
26-449	1	M	3050	V. Bag Scanz. R.O.P. 8-30-30 3:17 p.m.	Hematuria 9-2-30—9 p.m. Legs twitching 9-3-30	100 cc I.V. Bl. 9-3-30 12:30 a.m.	R- but mentally ret.	Lumbar puncture 9-3-30—2 p.m. blood
29-639	1	F	2740	Midforceps 12-26-31—8:27 p.m.	Hematemesis 12-28-31 2 a.m.	100 cc I.V. Bl. 12-29-31 6 a.m.	R-	Jaundiced 12-28-31

reduced to normal in two hours by oral administration of Vitamin K. At present they are trying to perfect an intravenous preparation, and advocate oral administration to the mothers in the antepartum state, especially in long or operative deliveries. Further work may result in this being an aid in prevention.

Maternal, i.e., parity and obstetrical factors, seem to have no influence on the causation although there is a preponderance of primiparae in our series, explained by the fact that the greater percent of our ward cases are of this class, there being 33 primiparae and eight multiparae. The manner of delivery had no bearing on the disease, for normal delivery, cesarean section, podalic version and forceps are encountered, as well as toxemia, placenta praevia, and premature separation of the placenta. Sex is almost equally divided with 23 males and 18 females. Capon reporting 61 cases, has about the same figures except primiparae and multiparae are equally divided, his cases being home and hospital deliveries.

DIAGNOSIS

This is usually made, eliminating those cases where blood originates from some extraneous source or cause.

Blood ingested during labor or from a bleeding nipple shows no systemic effect, whereas pallor, shock, and difficulty in nursing are prominent symptoms in true hemorrhage of the newborn. Where infection is a contributing factor, the usual concomitant fever is apparent, and a focus of infection invariably can be demonstrated. Vaginal bleeding and cord hemorrhage are self-evident, but we must never forget the possibility of the hemorrhagic factor.

The true hemorrhage of the newborn occurs usually during the second to fourth day, but may be earlier or even in the intrapartum state as demonstrated in one of our cases, or as late as the tenth to twelfth day. In the majority of our cases, hemorrhage is exhibited in the form of melena or hemoptysis or both, and it may be from or into any organ in the body. Of the 41 cases reported, 35 showed melena or hemoptysis, or both, but we did have umbilical, genitourinary, nasal, and local tissue involvement.

Determining the bleeding and clotting time is a help in diagnosis, both being increased in the majority of cases, the clotting time being the longer of the two. However, this is not a constant finding as we see cases where both are within normal limits with severe or fatal hemorrhage. E. L. Stone, in 1929, following similar observations, divided these cases into two classes: Class 1, when the clotting time is prolonged it presumes a deficiency in the prothrombin, and Class 2, where the clotting time is normal and hemorrhage occurs, theoretically a blood vessel deficiency is present, probably a lack of thrombokinase.

Irrespective of theories or explanations of this condition, the treatment remains the same, and in fact we do not delay treatment for sake of this examination. Brennerman, in his investigations of this feature, has noted an increase of the bleeding time over the clotting time is almost diagnostic of congenital lues, usually unsuspected. These cases should not be denied treatment for they may be tided over and with antiluetic therapy, hope for a successful outcome.

PATHOLOGY

No definite lesions have been found pathognomonic of this disease, although many pathologists report ulcers in the gastro-intestinal tract, varying from 5 to 40 per cent. I am prone to agree with Capon that these ulcers are secondary to submucous hemorrhage with subsequent ulceration. Our pathologists have reported no ulcers in this region in the few cases that have come to autopsy. In addition to the general anemia and tissue injury from hemorrhage, certain specific organs have been involved as is shown in the summary of our postmortem findings.

PROGNOSIS

This depends on early recognition of the disease and prompt and efficient treatment, as delay permits hemorrhage into vital organs such as the adrenals, which is generally fatal, or severe injury to the liver and brain by prolonged anemia or tissue invasion. When the brain is involved, prompt treatment may prevent disabling lesions or death.

TREATMENT

Although the use of coagulants such as fibrogen, thromboplastin, serum, and intramuscular blood have not given satisfactory results, we still find many relying on them in treating these cases. This is especially true of intramuscular blood, encouraged perhaps by the ease of administration, and the reported cures of a few cases. Sanford and Leslie in 1938 reported two cases in 5500 deliveries, one treated by intramuscular blood and the other with no treatment, both cases recovering. Following this experience they gave 20 normal infants intramuscular blood, checking the bleeding and clotting time before and after the treatment, and much to their surprise found an increase averaging 20 per cent above normal. Their impression was to discontinue this treatment and resort to intravenous blood transfusion which had been successful in other cases.

My experience has convinced me that there is only one means of combating this condition, namely, intravenous transfusion of whole blood at the earliest possible moment. Usual precaution regarding blood grouping and cross agglutination should be observed, for infants do have a blood group and, in a certain percent of cases, have agglutinins present. Lack of this precaution may lead to untoward reactions in the exceptional case, and be enough shock to shift the balance in an unfavorable direction.

Under local anesthesia, blood is transfused by means of a Vincent tube (100 cc.), obtained from the donor in the usual manner, using a vein in the ankle of the recipient, exposed by a small incision between the internal malleolus and the anterior tibral tendon. A special cannula to which is attached a rubber tube one inch long is inserted in the vein. Saline is injected to make sure we are in the vein, care being taken that the nurse or assistant is not compressing the vein above the operative site. The Vincent tube is then inserted, and blood is forced gently into the vein by means of a bulb attached to the upper end of the tube. Usually, 60-100 cc. of blood is sufficient to bring a moribund infant to normal, the amount being determined by the reaction obtained. The results are indeed gratifying and the return of a very sick infant to a normal state is at times very dramatic.

Seldom is it necessary to repeat a transfusion, this occurring once in my cases. This infant was extremely ill, the father being the donor, 100 cc. of blood having no effect on the hemorrhage, the child being definitely worse. The mother was then used, 120 cc. of blood given, with striking results, and the child was nursing normally in one hour. No grouping or cross agglutination was done, and perhaps may have been the cause of failure of the first transfusion. However, there should be no hesitation in repeating the transfusion if results are not obtained with the first.

Occasionally the ankle vein is too small in premature infants, and the external or internal jugular vein can be used. I cannot bring myself to use the longitudinal sinus in the new born, as is advised by some, because of the variability in its size, there being danger of piercing it and causing intracraneal hemorrhage. Examination of postmortem specimens will soon convince one of this fact.

After the operation the infant is permitted to nurse at once, and fluids liberally given, as no adverse reactions seem to occur.

In this series where no treatment was given, 88 per cent died, while intramuscular blood injections resulted in a 75 per cent mortality. On the other hand, when intravenous blood was the method of treatment, only 12.5 per cent (one case) had a lethal exit. This failure was due, I am sure, to the delay in instituting treatment after the hemorrhage had started.

From the result obtained in this series, there is no question as to the proper treatment, and I can only urge that as soon as the case is diagnosed, intravenous blood transfusion should be done at the earliest possible moment.

With recent vitamin observations, some hope is offered for the prevention of this condition, but until it is definitely established, we have only the above treatment in combating it.

952 Hanna Bldg.

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"Grande Multipara"

Because of the high maternal and fetal mortality associated with bearing the ninth child and above and in view of the transcendent value of such a mother to her family, it is believed that every woman who has had eight children should be offered contraceptive advice on the sole basis of grand multiparity. If contraception fails or if the husband and wife earnestly desire it, sterilization is justifiable. We often carry this out (following delivery of the eighth child), on the first or second day of the puerperium, by the Pomeroy method under local anesthesia. We may note, parenthetically, that ceasarean section is never indicated for the sole purpose of facilitating sterilization.—Nicholson J. Eastman, M.D., Baltimore. N.Y.S. Jour. of Med., Vol. 40, No. 23, December 1, 1940.

Efforts to eradicate tuberculosis should not be spread thin like butter over bread.—Louis I. Dublin, M.D., Metropolitan Life Insurance Co.

Subdiaphragmatic Abscess of Amebic Origin

Prior to the Chicago "Century of Progress" incident of 1933, the interest of the great majority of physicians of the United States in amebic dysentery and its complications was largely of an academic character, although Sistrunk in 1911, Sanford in 1923, Wright in 1926, and several other observers had pointed to the widespread incidence of this infestation and its relatively frequent discovery during the routine clinical examination of patients from widely separated portions of the country. The failure to make a correct diagnosis in many of the acute cases arising from the Chicago focus, the tragic results of the misinterpretation of these cases, and the extensive publicity resulting from the entire incident, can well be said to have made the physicians of the United States "ameba conscious." It is now generally conceded that amebiasis is a widespread clinical condition, affecting all ages and classes of the population, and it must be considered as a factor in the differential diagnostic problem in a considerable variety of complaints referable to the gastrointestinal system. Craig estimated in 1934 that, in all probability, not less than 10 per cent of the population of the United States are active carriers of Endameba histolytica with little or no resulting clinical symptoms. Most observers are inclined to agree with this estimate, although Goldburgh found only one case of amebic liver abscess (the most frequent complication of amebiasis) recorded in approximately 120,000 admissions and 3,000 autopsies at Jefferson Hospital in Philadelphia over a ten-year period. During the same period of time only five similar cases were observed among 232,000 admissions and 24,000 autopsies at the Philadelphia General Hospital. The total number of cases of amebiasis discovered by stool examination in the same group of patients is not stated, but the general inference is drawn that amebiasis is distinctly a rarity in the Philadelphia area. However, Weinrich, Staebler and Arnett reported an incidence of amebic infestation of 4.1 per cent in 1,060 college freshmen observed in Philadelphia in 1934. College freshmen usually come from the so-called "better elements" of the population, and the average class of clinic patients would probably show a higher index of infestation than that noted above. It is permissible to conclude, therefore, that the incidence of amebiasis in the Philadelphia area is not radically different from that observed in other communities of a similar character elsewhere in the country.—O. J. LaBarge, M.D., New Orleans; Rocky Mountain Med. Jour., Vol. 37, No. 12, December, 1940.

Genito-Urinary Diseases in Childhood

E. O. SWARTZ, M.D., F.A.C.S.

ENURESIS

WHILE bed wetting is not of itself a disease, but a symptom of some underlying condition, there is not a more distressing situation in childhood than the persistence of this habit. If this condition is firmly established in a child, all concerned will have to use tact, a sympathetic understanding, infinite patience, as well as firm determination in order to effect a cure. It is our opinion that in **most** cases the underlying causative factor is defective early training. Some of these cases present true behavior problems. This is evidenced by the fact that bed wetting will entirely cease while under hospital routine, only to be resumed on return home. There are certain physical causes, such as congenital anatomical anomalies, nerve or sphincter defects with or without infection, that may prolong the period of bed wetting as well as cause lack of bladder control in the daytime. A careful urologic examination is usually needed to exclude the possibility of the presence of some physical defect as the causative factor.

A urological examination should be part of a complete physical examination, and special attention should be paid to the endocrine balance of the child. We have seen several cases, with negative physical findings, cleared up by the use of mixed glandular therapy combined with mild local treatment to the posterior urethra. A plain X-ray of the kidneys, ureters, and bladder should always be made and this will show the presence or absence of spina bifida occulta or of stones in the urinary tract. With the development of intravenous urography, the demonstration of the presence of anomalies, such as supernumerary kidneys and ureters, of bladder diverticulae and urethral valves, has been made possible without the use of the cystoscope.

A careful bacteriological as well as microscopic study of the urine should always be made. We have seen cases where "excess acidity" of the urine had been assigned as the cause and prolonged alkalinization carried out, without any change in the condition. We are of the opinion that neither urinary acidity nor alkalinity, per se, will cause bed wetting. Excessive acidity may cause urgency with occasional loss of control, diurnal as well as nocturnal.

If a cause cannot be ascertained without it, a cystoscopic examination with ureteral catheterization and retrograde pyelograms should be carried out. A general anesthesia may be necessary for this. This will give us the bacteriology of the kidney pelvis and the anatomy of the urinary tract. Ureters emptying into abnormal locations such as the urethra or vagina have been picked up and an overflow from a neurogenic bladder has been discovered as a cause for persistent bed wetting. Upon these findings appropriate therapy can be based. We have been impressed with the number of children whose only demonstrable pathology was a relaxation of the internal sphincter, so that we were able to withdraw the scope into the posterior urethra. These cases usually respond well to local treatment, however, space does not permit a discussion of local therapy.

CONGENITAL ANOMALIES

The existence of congenital defects of the external urinary organs is usually discovered on routine physical examination. These include various degrees of urethral and bladder abnormalities, from very slight defect to complete exstrophy of the bladder. On complete urologic study, the various internal abnormalities, such as urethral valves and flaps, vesical diverticulae with or without stone, congenital hydroureter and hydronephrosis are easily diagnosed, and appropriate surgery may be carried out.

In exstrophy of the bladder, the perfection of ureteral transplant to the rectum, by the Coffey technique, offers relief to these unfortunates. This should be carried out in appropriate cases.

CYSTITIS

Inflammation of the bladder mucosa may be either acute or chronic and be primary and limited to the bladder or secondary and be associated with infection of the upper urinary tract or of the urethra.

Acute cystitis is associated with frequency, urgency, painful voiding, and often terminal hematuria. The urine passed in small amounts at frequent intervals, contains blood and pus cells and the infecting organism. The urine should be centrifuged and a smear of the sediment stained with methyline blue and examined microscopically. This will give us the type of organism present. If pus without bacteria be found, this should arouse the suspicion of urinary tract tuberculosis and a search for acid fast bacilli should then be made. If acid fast bacilli are found, their origin must be determined. By means of ureteral catherization, retrograde pyelograms, and separate kidney function studies,

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Dr. Swartz was selected to write an editorial summary on the above subject by a committee of ten leading Ohio pediatricians.

the localization of the tuberculosis in either kidney is established. Tuberculosis of the urinary tract in children is usually primary in the kidney. The existence of primary vesical tuberculosis is open to question. Should there be a focus located in either kidney, nephrectomy is indicated and the patient should then be treated as for tuberculosis elsewhere, with rest, over-feeding, and fresh air and medication as indicated. There is a growing tendency toward conservatism in the surgery of genito-urinary tuberculosis.

The treatment of acute cystitis calls for the limitation of fluids to the minimum, alkalinization, and sedation. Codea or even morphia may be required to control the bladder spasm. Heat, locally, suprapubicly, or in the form of hot sitz bath, will shorten the course of the disease. In infection limited to the bladder, the temperature reaction is usually minimal and may be disregarded. After the acute symptoms have subsided, urinary antiseptics with mild local irrigations are indicated.

The same principles that apply to the use of sulfanilamide and its derivatives in pyelitis, apply in the treatment of cystitis. After the acute symptoms have disappeared, urological examinations should be made. These are necessary to exclude stone and anomalies.

Chronic cystitis is often associated with and dependent upon chronic pyelitis. In its treatment every possible endeavor must be made to remove the cause and establish adequate bladder drainage.

A bladder that does not completely empty itself will not sterilize itself. The use of urinary antiseptics, together with irrigations and instillations of antiseptic solutions, will usually control infections of this type. We have found that fresh, hot solution of $AgNo_3$ 1-10,000 and increasing strength, give our best results. Do not over-treat an inflamed hollow viscus. Rest, anatomical as well as functional, is the first prerequisite in the healing process.

UPPER URINARY TRACT INFECTIONS

Pyelitis in childhood may be either acute or chronic and is usually associated with infection of the bladder. The picture of acute pyelitis is fairly typical. Sudden onset of acute pain in either flank with high fever, often nausea and vomiting, and urinary frequency. There is usually a high white count up to 20 m. or more, and unless the ureter is blocked the urine contains pus, blood, and the causative organism with albumen. There is always muscle spasm and costovertebral tenderness on the affected side. The condition must be differentiated from pneumonia and pleurisy, and from appendicitis, ureteral stone, and other acute abdominal conditions.

The treatment of **acute** pyelitis is medical, and instrumentation such as ureteral catheterization is contraindicated. Fluids, sedation, and antipyeretics are indicated. Urinary antiseptics by mouth or blood stream may be used, depending on the organism present. The use of sulfanilamide and its derivatives promises much when given under proper control and checked by blood determination of drug content. This group of drugs is efficient and potent, but not free from danger unless carefully supervised. Recent work by Alyea indicates that it is not necessary to maintain a high level of these drugs in the blood stream, but that good results may be expected in colon and coccus infections by the maintenance of a low level of blood drug concentration for 10 to 14 days.

The acute case either clears up entirely or becomes chronic with acute exacerbations. When this occurs, a complete urologic examination, cystoscopy, ureteral catheterization with both intravenous and retrograde pyelograms should be made. It is in this type of case that we often find congenital anomalies which produce urinary stasis and predispose to reinfection. It is well established that a urinary tract, the seat of an anatomical abnormality, is more susceptible to infection and to reinfection than the normal.

In the recurring pyelitis, with no gross abnormality, we have had our best results from ureteral catheterization with distension of the ureter and pelvis, using 1 per cent $AgNo_3$ solution as we withdraw the catheters. One treatment often effects a cure, but several pelvic lavages of this kind may be needed.

TUMORS OF THE KIDNEY

Our experience with kidney tumors is not a happy one. Although every variety of tumor of the kidney seen in adult life has been seen in childhood, the characteristic tumor of the first decade is the mixed embryonic type or Wilm's tumor, or as pathologists now designate it—carcino-sarcoma. These cases are not uncommon and present a characteristic symptom complex which is quite different from that seen in adults. In the adult, hematuria is the dominant symptom followed by pain and the discovery of a tumor mass with or without pain. The development of pyelography added a fourth symptom to this diagnostic triad, namely, a characteristic filling defect of the kidney pelvis, and it is to be noted that any three of these four symptoms may be entirely lacking.

In the child, however, the clinical course is reversed and hematuria is very rare and usually a late symptom. In the vast majority of cases (80 to 90 per cent), the first symptom is a palpable abdominal tumor; and in our experience, most palpable abdominal tumors in childhood arise in the kidneys. Pain is not an outstanding symptom, is often absent, and when present is of the dull aching character. In several recent cases, the tumor mass was discovered on routine physical examination. These tumors develop rapidly and may reach enormous size. It is not unusual to see tumors the size of a child's head and the mass may fill the entire abdomen. The tumor originating in the kidney grows out toward the peritoneal cavity, but a palpable tumor traceable back to the costovertebral angle is usually renal. On the left side, splenic enlargements may be confusing. These children usually show a progressive anemia, loss of weight, and often gastro-intestinal disturbances, with a low grade fever, but may have a perfectly normal urine and blood chemistry, and a normal phthalin output.

Diagnosis can be established by means of pyelography, either intravenous or retrograde or both. This shows a characteristic filling defect or deformity of the renal pelvis and ureter, either or both. By this means large congenital hydronephroses and congenital cystic kidneys may be ruled out, as may retroperitoneal tumors nonrenal in origin. These tumors extend by the blood stream but do not metastasize until late. Secondary growths occur in the lungs, liver, brain, and bones. The treatment is unsatisfactory and the prognosis is unfavorable. At the Childrens' Hospital we have used radical surgery combined with intensive deep X-ray therapy. We have used radiation alone, radiation with surgery both before and after operation, and we have no case in our series living over two years after nephrectomy. The use of blood transfusions pre- and post operatively has lessened the operative mortality, but until we have more satisfactory therapeutic agents, the prognosis as to cure will continue to be bad.

Doctors Bldg., Cincinnati.

Adhesions

If many adhesions are divided or if considerable unperitonealized gut remains, we believe the abdomen should be filled, just as the incision is being closed, with Ochsner's papain solution. After using it in a small series of cases of massive adhesions we concluded that this ferment definitely helps to prevent the reformation of adhesions: certainly our treated cases did better than our controls. Should the gut be torn and material infected with the colon bacillus spilled, the employment, intraperitoneally, of Steinberg's coli-bactragen may be helpful in preventing a colon-bacillus peritonitis.—W. Edwin Bird, M.D., Wilmington, Del.; Del. S. Med. Jour., Vol. XII, No. 11, November, 1940.

Life cannot be made shock-proof; man must be trained to "take it."—Fetterman.

Treatment of the Heart

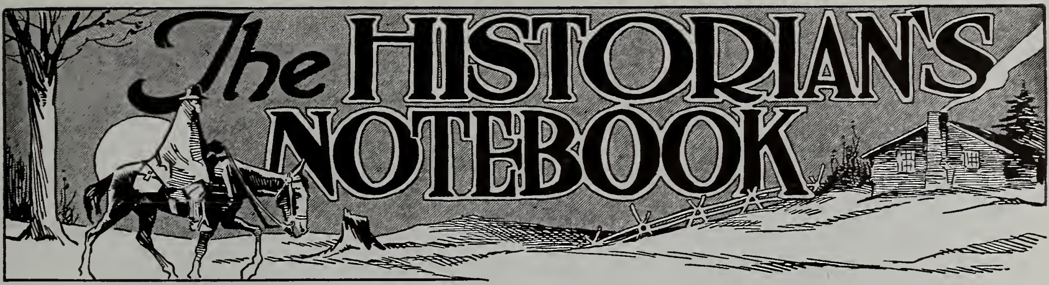
The indications for digitalis therapy had been established pretty well by 1930, but it remained for the subsequent decade to choose the best preparation. Because of its stability and greater accuracy in dosage, the standardized powdered leaf is now given preference over other preparations in Anglo-Saxon countries. In Germany, strophantin, often given intravenously, is preferred. There one hears little of the dangers of the drug so frequently emphasized in this country.

Another advance has been the early use of diuretics. It was thought for a long time that if digitalis and bed rest alone could accomplish compensation, diuretics were unnecessary. It is now realized that early diuretic action will facilitate greatly the effect of digitalis and so both are given together in full doses. While digitalis for the purpose of rapid digitalization is given in much larger doses than formerly, the maximal doses recommended by Eggleston are rarely necessary. One method of digitalization which has stood the test of experience is to give three cat units three times the first day, two cat units three times the second day and one or two cat units three times a day thereafter until digitalization is achieved.

During the last few years the mercurial diurectics have increased in popularity. Thanks to the efforts of the manufacturing chemists they have been rendered less toxic. By combining them with theophylline, products have been obtained which act both on the glomeruli and the tubules of the kidney. In the treatment of congestive failure diuretics should be used early, either mercupurin or salyrgan to which theophylline has been added. Both contain the same amount of mercury and approximately the same amount of theophylline.

The recent advances in chemotherapy have not yet saved patients with subacute bacterial endocarditis, but the encouraging experiences in related fields warrant a certain amount of optimism for the future therapy of these patients.

The relations between cardiology and surgery and obstetrics have been placed on a more rational basis during this decade. The internist is learning rapidly to distinguish between the factors which have a bearing on the risk of operation and those which can be ignored safely. Murmurs and other physical signs are not nearly as important as evaluation of cardiac reserve. The same argument applies to obstetrics and its realization has resulted in a marked lowering in the death rate from heart disease in all first rate obstetrical clinics.—Julius Jensen, M.D., St. Louis; Jour. of Mo. S. Med. Assn., Vol. 37, No. 12, December, 1940.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

The Ohio Frontier Doctor—A Portrait

PAUL M. DAVIS, M.A., AND PHILIP D. JORDAN, PH.D.

THE frontier doctor in Ohio was a highly respected member of his community. Nor was the early physician unaware of the part he played in pioneer life. A body of representative Cincinnati doctors said in 1821, "The Medical Profession is a fraternity constituted by the universal suffrage of civilized society. Its object is to preserve and restore health; in accomplishing which, a Heathen has said, 'that in nothing else do men so nearly resemble the gods.'"

The respect accorded the earliest Ohio doctors was a tribute to their diligence and to the nature of medical work, for the first physicians who practiced in the state came from distant regions into communities where they were almost entirely unknown. Many of the emigrant doctors came to Ohio from the East. As soon as a few hundred settlers located in an Ohio village, doctors from New England, New York, Pennsylvania, and other states moved in to minister to pioneer medical needs. They showed a tendency to locate in areas which had been settled by predecessors from their home states or districts. Thus, in the lower part of the Western Reserve, Summit County's first physicians came largely from Connecticut, Vermont, and Massachusetts. A few arrived there from New York and Pennsylvania. The eastern counties of Ohio were settled by emigrants from the immediate East, and the first physicians followed that trend. Dr. John Hubbard came to Ashtabula County from central New York; one of the first practitioners of Harrison County was a native of Pennsylvania; and Dr. James Langworthy, of Zanesville, practiced in Troy and Albany, New York, for 23 years before he moved to Ohio.

Medical practice in central and southern Ohio was carried on by physicians from all the states of the East. The location of doctors from the "Old Dominion" in the Virginia Military Lands between the Little Miami and the Scioto rivers made the medical profession of that part of Ohio even more heterogeneous than in surrounding areas. Several of the Virginians who practiced in Ohio were highly respected for their talent. Dr. Isaac Telfair came to Hillsboro about 1825 and became a leading physician there. His success was paralleled by that of other Virginians: Dr. William B. Willson and his nephew, Dr. William F. Willson, both practiced in Adams County, where they enjoyed the respect of a great number of settlers. In Xenia, Joshua Martin was one of the leading doctors from the tidewater state.

The region around the Miami rivers drew heavily upon Pennsylvania, New York, and New Jersey for its first physicians. In Warren County, for example, Dr. David Morris, from Reading, Pennsylvania; Dr. Charles D. Hampton, from the same state, and Drs. DuBois, Morrill, and Van Harlingen, from New Jersey, were all representative. At Cincinnati, German doctors moved among the physicians of Eastern origin, and catered to the many German settlers in the town. One German physician, Mr. P. Bomino, claimed an unusual record. He informed the public that "He was graduated in Europe, served as a surgeon in Bonaparte's army, and was elected ship doctor on his voyage to America, for 300 passengers." His success in the United States was phenomenal, for in a description of his practice, Dr. Bomino modestly confessed to Cincinnatians, "Since he came to this country, he has cured Cholera, Hardness of Hearing, Tetter, Ring Worm, Scorbutic Eruptions, Leprosy, Meculial (Mercurial) Diseases, Scrofula, or King's Evil, Diseases of the Liver, Dyspepsia, Piles, Gravel, Dropsy, Phthisic, Cancer, Weak Eyes, Asthma, Catarrhs, Foul Ulcers, Sore Legs, Venereal

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From the Department of History, Miami University, Oxford, Ohio.

Diseases, Gonorrhoea, White Flood, Rheumatism, Pains in the Joints from Cold, etc." Such an enviable record was, no doubt, in part the product of a good German imagination.

The northwest section of Ohio showed the effects of migration through the Connecticut Reserve, and the first physicians in and around Toledo came from New England, with a few additions from other states of the East.

THE EMIGRANT DOCTOR

The emigrant doctor with ten or a dozen medicine bottles and a tiny case of instruments was a welcome figure as he appeared in the settlement he had selected for his place of practice; he was the first to bring professional medical skill to the Ohio frontier. As the state became more thickly settled, and the first native born generation grew to manhood, an increasing number of Ohioans entered the medical profession. In the 1830's and 40's, Ohio-born physicians began heavily to outnumber the emigrant practitioners.

In the first years of professional medicine in Ohio, it was not possible to distinguish between rural and urban practice. The doctor who came from the East by carriage or boat, or perhaps on horseback, and set up a shop in an Ohio settlement, soon discovered that many of his calls came from the scattered huts of frontiersmen far from the little town. It was only as some of the settlements grew to the proportions of cities that differentiation of city and rural practice was possible.

The number of doctors in the towns varied considerably from place to place, but the usual proportion was one practitioner for every three or four hundred people in the settlement. The smaller the town, the greater the number of doctors in proportion to the population. In 1831, Cincinnati had well over 25,000 inhabitants and enjoyed the services of between 40 and 50 physicians. By the middle of the century, there were 115,000 people and 67 regular practitioners. The increase in population had not been matched by a proportionate increase in the number of doctors. In 1833, eleven physicians of Dayton were providing medical service for about 3,400 residents, while Portsmouth had six doctors to care for a little more than a thousand people. The relative number of doctors was even greater at Youngstown, where a tiny settlement of 150 people received the attention of two physicians. One of the most striking examples of the difference between large and small settlements existed in southeastern Ohio. Zanesville had at one time 4,000 residents and 10 physicians, while in an adjoining county, McConnelsville was a place of less than 400 inhabitants with four active doctors. In many parts of Ohio, particularly where towns were few and scattered, the physician in the small settlement made up in rural practice what he lost as a result of the close competition within the village.

The first location of the emigrant doctor was frequently more a matter of chance than of careful examination. In such cases, a change of residence was often effected at some later date. There were occasions, however, when a more or less accidental location proved permanent. A pioneer doctor of Lucas County was once asked how he came to practice in the town in which he lived. He replied that he and "Dr. W—" came there about 1837, "Not because we had ever heard of the place, but because, in trying to get to a chosen field, we got 'stuck in the mud' here. To go back was mud; to go forward, was more mud; and so we planted ourselves here to grow up with the country, and benefit those who might desire our professional assistance."

As the number of doctors in Ohio increased, and some of the first settlements grew through the town stage into cities, it was possible to classify some physicians as primarily "country doctors" and others as "city doctors." The average city physician was a more polished gentleman than his medical brother who rode country by-ways. The nature of his surroundings and the class of people to whom he catered were factors which sometimes smoothed the "rough edges" of the urban doctor. He moved more easily in polite society; his talents were more varied.

CITY DOCTOR DISTINCTIVE IN DRESS

The doctor whose practice was largely confined to the city was often distinctive in his dress. There seemed to be a marked inclination to retain original habits of clothing in the larger towns. While the European physician in the small settlement usually adopted the serviceable attire of the frontiersman, the city doctor from the Old Country retained his native habit in part or entirely. Thus, it was possible for a resident of Cincinnati to remember a Dr. Ramsey as "of Scotch descent, one of the old school gentlemen, stiff, starched, and stately, with his *queue* and high-topped boots. . . ." Other observers noticed the physicians who served only the wealthy families; these were "the few fashionable doctors who did their work in powdered wig, cocked hat and knee breeches. . . ." That an elegant frame of mind often accompanied dignified dress is hardly to be doubted. A woman traveling in the West observed that one of Ohio's leading urban physicians showed a "slight degree of western inflation."

In addition to differences of dress and attainments, the city practitioner in Ohio enjoyed more favorable conditions of practice than did his rural competitor. A drug or an apothecary shop supplied most of his medicines, prepared and ready to give; he traveled city streets, rough, unkempt passages, but eminently better than muddy country paths; he enjoyed the luxury of a carriage; he was able to see many of his patients in the comfort of his home or shop (Dr. Daniel Drake's office hours in Cincinnati were from 12 to 4); and the city doctor was in a position to earn a handsome income. Samuel Gross said that his practice in Cincinnati brought him an income of "a little upwards of nine thousand dollars" in one twelve month period.

But such conditions of life and practice were atypical in the medical profession of early Ohio. The first half century of Ohio's development was a period in which there were few towns of any size; consequently, urban medical practice constituted a minute portion of pioneer medicine in the state. The representative doctor was the practitioner who lived in a small settlement and drew much of his patronage from the surrounding area. His work was done among the Ohio pioneers in a frontier setting. His methods were the characteristic medical practice of early Ohio.

The frontier doctor of Ohio was a man on horseback, riding lonely forest trails to the outlying cabins of his patients. As he wended his way through the ragged country around the settlement, he was distinguished from the ordinary settler only by a familiar facial expression, or a slight personal characteristic, or by the saddlebags thrown across the withers of his horse. The saddlebags were the doctor's physical mark of distinction. In them, the pioneer physician carried his medicine bottles—10 to 20 of them, with wooden, cork, or glass stoppers. In addition, two or three sections of a saddlebag might be reserved for a lancet or a scalpel, a scarifier for bleeding purposes, and a pair of metal tweezers. Thus equipped, the Ohio physician rode out to meet the enemy.

FEW ROADS EXISTED

It was usually a hard ride. What few roads existed in Ohio were in a chaotic condition. An English traveler found the roads of the state "altogether in a state of nature, the trees only just chopped off about a foot from the ground, and rocks, and stones, and gullies left to be got over as best we can. . . ." That was in 1819. At that time, it was customary to span wet ground by laying split logs side by side to make a roadway; and off the "main lines," the paths by which the doctor reached his scattered patients were little more than hand-picked trails through the wilderness. Daniel Drake, who was probably the leading physician of the West for many years, remarked that the early country practitioner often performed "rides of 20 and even 30 miles . . . on horse-back, on roads which no kind of carriage could travel over." Drake's remark was not overdrawn. A pioneer doctor of Springfield made a call in the month of January, 1816, when, as he said, "The quantity of rain was such as with the snow to make a perfect porridge." On another occasion, the same physician said he "Rode to Moses Shoup's after dark, very muddy."

PROBLEMS OF TRAVEL

Every season of the year gave the Ohio pioneer doctor a series of problems of travel. In the spring, heavy rains and thaws sent the doctor and his horse plunging through swollen streams, saddlebags held aloft to keep the bottles and instruments dry. The warm night rides of summer were made in the midst of eerie calls of birds and burrowing animals; and the long, wailing howl of timber wolves as they followed the doctor's trail brought a slackening of the reins and a quickening of the trusty horse's step. With the arrival of autumn, frosty nights that caught the traveling physician unprepared sent him home damp and chilled. And in winter, icy trails and cutting winds often drove the doctor and his horse into a forest shelter or the cabin of a settler along the way. But the pioneer physician saw his patients 12 months of the year; seldom did weather or distance stop him. One of Montgomery County's early physicians said that on the last day of the year 1815 he rode 13 miles in bitter cold and through three or four inches of snow to see a patient. He did not return from that call until the following day. The doctor had spent New Year's Eve and the morning of New Year's Day in the home of his patient. A pioneer physician who practiced in the region of the Maumee River boasted that during "the so-called sickly season" in 1839 and 1840, he rode an average of 50 miles on each of five successive days.

Such feats of endurance ordinarily brought a meagre financial return. The modest home, simple, even rough dress, and humble behavior of the frontier doctor were sufficient indication that pioneer medical practice brought a slight yearly return. The county commissioners of Warren County estimated in 1830 that there were 19 doctors in the county earning five hundred dollars per year; one fortunate practitioner was reported to have collected a thousand dollars. Such conditions were probably representative for the state. It is obvious that the country doctor led a simple life, although judged by the standards of the frontier period, his lot was entirely satisfactory.

Of the frontier doctor's vices, more was spoken and written than proved. Scattered accusations of profanity, intemperance, and "disregard for the Christian Sabbath" were largely unsupported assertions. There was, however, one general condemnation of the frontier doctor which defied all attempts at refutation. The pioneer physician had little love for his professional brother. Competition was sometimes bitter, and the genuine animosity of rival physicians often generated behavior unbecoming men of professional rank. Naturally, doctors in immediate competition were the worst offenders. The unhappy situation was recognized in medical circles as well as by the general public. In 1831, a professor in Miami University noticed that "The habit of falsifying has tended more than any other cause to produce strife and bad feeling in the medical brotherhood." The following year, a group of practitioners united in condemning the "prevailing want of generous forbearance and liberality" in the profession; they found that "Manifestations of an embittered spirit have been so frequent under these circumstances that the public expect it as a matter of course. . . ." It was no mystery how the "public" came to expect doctors' quarrels, for the weekly papers of early Ohio often printed letters of physicians containing vitriolic replies to previous accusations. The Ravenna *Western Courier* devoted six columns of an 1829 issue to a letter by "Medicus." "Medicus" had been publicly accused of trying to monopolize practice; his extended reply hinted that his opponent was a jealous physician. The matter did not rest there, however, for some weeks later there appeared in print an answer to the six column response of "Medicus." And so many frontier doctors fought—replying to replies, and injuring the prestige of organized medicine.

The worst hotbed of strife was in Cincinnati, where the professors in the medical colleges periodically flared up in unseemly quarrels. One of the most serious antagonisms in that city was the hostility between Dr. Daniel Drake, founder of the Medical College of Ohio, and Dr. John Moorhead, who later became a professor in the college against Drake's wishes. Their enmity lasted for at least 20 years, and was openly avowed, to the injury of both physicians. The hatred of the men was so thorough that it often ensnared innocent bystanders. One of Drake's students related the following story: "The old Drake and Morehead quarrel was renewed in February, 1839, by a visit made by myself and a Kentucky student . . . to hear Morehead lecture. He sent the janitor to order us out, remarking that 'Drake's students should not attend his lectures.' My Kentucky friend was collared by the janitor, and being high spirited, blacked his eyes. He was arrested and fined by the mayor." Professional quarrels of magnitude sufficient to involve a third party in a public brawl lowered the entire medical fraternity in the eyes of many Ohioans.

An influence which counteracted some of the hostility within the medical profession in Ohio was the organization of medical societies. The frontier doctor in the state was not over-zealous in maintaining such associations, and his attitude bespoke a combination of self-satisfaction and self-reliance. But there were a few frontier medical societies. They sprang up sporadically after 1815, and usually died as unexpectedly as they appeared. A society was said to have been formed in Cincinnati in 1819, but it was in existence less than a year. About 1820, a "Medical Association" was organized in that city; its first roll listed 18 members. The association made little stir after its founding, and must soon have passed completely out of the picture.

FRONTIER MEDICAL SOCIETIES

Many of the first medical organizations in Ohio were the offspring of state legislation. In 1824, the Ohio General Assembly divided the state into 20 medical districts and decreed that each local area should organize a professional society of physicians. By 1833, there was such a pronounced lack of interest in the work of the local organizations that the legislature revoked the entire plan. It was not until 1846 that a regular state medical society came into being.

While the larger societies were being formed and disbanded, there was occurring a gradual growth of smaller local organizations. As the number of physicians increased in the towns and counties, it became possible to set up medical societies within those restricted areas. A society was organized in Dayton as early as 1816; there was one formed at Lebanon in 1837, a Highland County group organized in 1838, and a society was begun in Summit County four years later. A Maumee Valley Medical Association was holding meetings in the 1840's, but the city of Toledo had no organized medical group until after 1850.

The frontier doctor who attended the medical society meetings usually paid yearly dues for the privilege of participating in discussions of various medical questions of the day. There were problems of ethics, legislation, and treatment to be considered; and the formal meeting was often followed by a bountiful pioneer dinner, and songs and smoking. A typical medical society discussion was that held in Dayton on April 7, 1817. A member of the group said, "The question for discussion was, In what is commonly called Bilious disease is there a redundance or deficiency of bile? This was discussed by all the members present, but no decision made. . . ." While there was not always a definite conclusion formulated in the society's group meeting, the mere interchange of ideas must have sent many frontier doctors out on their calls equipped with new concepts and new methods.

The pioneer doctor—a man on horseback. A vigorous man. Sometimes a lonely man. And always a man of paradox, for he went forth with cruel weapons on a mission of mercy.

Proceedings of The Council

Budget for 1941 Adopted at Meeting on December 8; Legislative Questions Discussed; Plans Made for Annual Meeting; Miscellaneous Business Transacted

A REGULAR meeting of The Council of the Ohio State Medical Association was held on Sunday, December 8, 1940, State Headquarters Office, Columbus. The following were present: President Skipp; President-Elect Paryzek; Treasurer Beer; Councilors Schriver, Hogue, Noble, McCormick, McNamee, Rutledge, Goehring, Swan, Seiler, Sherburne, and Burley; Dr. Hein, chairman of the Committee on Public Relations and Economics; Drs. Brush and Kiely, delegates to the A.M.A.; Dr. Forman, Editor of *The Journal*; Executive Secretary Nelson, Asst. Executive Secretary Saville, and Director of Public Education Aszling.

On **motion** by Dr. McNamee, seconded by Dr. Paryzek and **carried**, the minutes of the meeting of The Council on October 13, 1940, were **approved** as published in the November issue of *The Journal*

Membership—Membership statistics were reported as follows: Membership of 6,463 on December 8, 1940, compared to 6,374 on the same date a year ago and to 6,388 as December 31, 1939.

Members of The Council reported on visits to and activities in their respective Councilor Districts.

REPORT OF COMMITTEE ON PUBLIC RELATIONS AND ECONOMICS

Dr. Hein reported on a number of questions considered by the Committee on Public Relations and Economics at its meeting on Sunday, November 24. Action on the various matters reported was as follows:

Tuberculosis Program—On **motion** by Dr. Sherburne, seconded by Dr. McNamee and **carried**, The Council **approved** the committee's recommendation that the suggestion for organization of a tuberculosis educational campaign in Ohio and the creation of a special organization in the various Councilor Districts for such program be referred to the Sub-Committee on Public Health Education for study and a report to the Committee on Public Relations and Economics.

Premarital Examinations—A recommendation of the committee that the State Association reaffirm its present policy regarding premarital physical examination proposals was **approved** on **motion** by Dr. Sherburne, seconded by Dr. Noble and **carried**. This policy, in effect, provides that the State Association should **not** sponsor such legislation, but should provide members of the Legislature and others with proper information and advice on the content of legislative proposals which may be introduced so that any law which may be enacted will be workable and will contain ample protection for both the public and the medical profession.

Support Pledged—On **motion** by Dr. Rutledge, seconded by Dr. McCormick and **carried**, The Council approved a recommendation of the committee that the State Association offer every possible assistance to the State Medical Board and the State Industrial Commission in their efforts to obtain adequate appropriations at the forthcoming regular session of the General Assembly. It was pointed out that the Medical Division of the State Industrial Commission is especially in need of more funds to be used in improving administrative facilities of that Division, and that the State Medical Board is handicapped in its investigations of violations of the Medical Practice Act and its other administrative duties because of inadequate appropriations.

Enabling Act—On **motion** by Dr. McCormick, seconded by Dr. Noble, minor technical changes in the proposed Enabling Act for Medical Service Plans, which had previously been approved by the committee, were **approved** by The Council.

Conferences Suggested—Dr. Hein presented a report on the activities of the Sub-Committee on Legislation and on plans which are being made with respect to promotion of the proposed Enabling Act on Medical Service Plans. Members of The Council were requested by Dr. Hein to arrange, if possible, for conferences in their districts with members of the Sub-Committee on Legislation and local legislative committeemen. There was a general discussion of the Enabling Act and the promotional campaign.

On **motion** by Dr. McCormick, seconded by Dr. Rutledge and **carried**, the report of the Committee on Public Relations and Economics, as a whole, was **approved.**

Workmen's Compensation—Several Workmen's Compensation questions were discussed and, on **motion** by Dr. McNamee, seconded by Dr. Sherburne and **carried**, were referred to the Sub-Committee on Workmen's Compensation for consideration and conference with Dr. McCurdy, chief of the Medical Division of the State Industrial Commission.

1941 ANNUAL MEETING

The Executive Secretary presented a report on arrangements made with Hotel Cleveland, Cleveland, for the 1941 sessions of the House of Delegates of the Ohio State Medical Association during the week of June 2-6 when the Annual Session of the American Medical Association will be held in Cleveland. It was pointed out that proper facilities have been provided for sessions of the House of Delegates on Tuesday afternoon, June 3, 4:00 P.M., and Wednesday evening, June 4, 6:30 P.M., both at Hotel Cleveland. The Wednesday evening session will be a dinner session, complimentary for members of the House of Delegates of the State Association and tickets to be made available for any Ohio physician who may care to purchase one and attend this dinner session. It was the sense of The Council that no special program should be provided for that evening, but that the regular session of the House of Delegates should be held following the dinner.

The question of whether a meeting of The Council should be held in Cleveland that week or in Columbus prior to that week was discussed. Action on this matter was deferred until the next meeting of The Council.

MEDICAL PREPAREDNESS

Dr. Paryzek, chairman of the Committee on Medical Preparedness, reported on the activities of that committee. He stated that, on November 28, personal letters, over his signature as chairman of the committee, had been mailed to 2,315 Ohio physicians who up to November 17 had not filed the A.M.A. preparedness questionnaire with the A.M.A. office at Chicago. That letter, he reported, requesting return of the questionnaire, had been accompanied by a postal card on which the member was asked to indicate whether he intended to send in the questionnaire or to disregard it. Dr. Paryzek said that up to December 8 844 physicians had returned the card, indicating that the questionnaire had been mailed to Chicago and that approximately 120 had returned the card with notations such as "retired," "disabled," "in service," "not interested," etc. Dr. Paryzek said that his committee would meet on December 22, at which time the committee would discuss a policy as to additional follow-up procedure among physicians who have not sent in the questionnaire.

Dr. Paryzek also reported that approximately 150 Ohio physicians are, at the present time, in active military service. He said that the headquarters for the Fifth Corps Area has indicated a considerable number of medical reserve officers will be called between December 15 and January 15, and that perhaps by next July all Ohio medical reserve officers would be called for physical examination with a possibility of induction into the service. There was a general discussion of the way the Selective Service machinery is operating in Ohio. Members of The Council expressed themselves as being well satisfied with the fine cooperation between the State Selective Service Headquarters, especially Colonel Boucher, chief medical officer, and the Committee on Medical Preparedness of the State Association. The Council also expressed its appreciation for the excellent services being rendered by the various county society medical preparedness committees.

On **motion** by Dr. McNamee, seconded by Dr. Noble and **carried**, The Council expressed appreciation to the Committee on Medical Preparedness and **approved** Dr. Paryzek's report.

NYA HEALTH PROGRAM

A communication from the headquarters of the National Youth Administration of Ohio, pertaining to a proposed health program for NYA youth in this state and requesting assistance and advice of the Ohio State Medical Association, was read. On **motion** by Dr. Schriver, seconded by Dr. McCormick and **carried**, the following resolution on this question was adopted:

Resolved: That The Council appreciates the opportunity afforded by the National Youth Administration of Ohio to confer with officials of that agency on questions pertaining to the establishment and maintenance of a health program for young people participating in the NYA program in this state. Believing that any health program which may be initiated by the NYA in Ohio needs competent supervision and the guidance of the medical profession, The Council offers to NYA officials the assistance of the Ohio State Medical Association in efforts to evolve a health program that will be based on sound principles and practical from an administrative point of view. The Council herewith instructs the Committee on Public Relations and Economics to act as a liaison between the Ohio State Medical Association and the National Youth Administration of Ohio on this matter. Realizing that a program designed to affect all parts of the state must be elastic enough to meet local conditions and situations, The Council feels that any health program established by the NYA should provide for a reasonable degree of local autonomy, especially with respect to administrative details and procedures, and that such matters should be worked out jointly by the NYA and the respective county medical societies, after a general policy has been agreed upon by the NYA and the Ohio State Medical Association.

MISCELLANEOUS

Women's Field Army—A communication from Dr. Lawrence A. Pomeroy, chairman of the Executive Committee of the Women's Field Army Against Cancer, was read and discussed. On **motion** by Dr. McNamee, seconded by Dr. Paryzek and **carried**, the Executive Secretary was instructed to answer the communication and convey to Dr. Pomeroy the sense of The Council on the matters referred to in the letter.

The motion also contained endorsement of the nomination of Dr. Fred M. Douglass of Toledo as an additional member of the Executive Committee.

Amendments—Amendments to the constitution and by-laws of the Erie County Medical Society, recently adopted by that society and submitted to The Council for approval, were **approved** on **motion** by Dr. Goehring, seconded by Dr. Sherburne and **carried.** The Executive Secretary was instructed to inform the secretary of that society that it would be desirable to make certain changes in the amendments for the sake of clarity and procedure, although the amendments as they now stand are not in conflict with the Constitution and By-Laws of the State Association.

Regional Postgraduate Lectures—Mr. Saville, Assistant Executive Secretary, reported on the 1940 course of Regional Postgraduate Lectures, just completed. A check of registration cards showed, he stated, that 1,184 members of the State Association had attended at least one session of the lectures.

REPORT OF COMMITTEE ON AUDITING AND APPROPRIATIONS

Dr. Sherburne, chairman, reported for the committee on Auditing and Appropriations. Action by The Council on the various matters reported by the committee was as follows:

Waiver of Dues—A resolution providing for waiver of 1941 State Association dues for physicians inducted into the military service who were members of the State Association in good standing in 1940, or for physicians who completed their medical education in 1940 or will complete it in 1941 and who are accepted by a component medical society, was **adopted** on **motion** by Dr. Hogue, seconded by Dr. Burley and **carried.**

(See page 57 for complete text of resolution, certification form, etc.)

Investments—A recommendation of the committee that any amount which may be realized by the State Association from Government bonds which may be called during 1941 should be reinvested in United States Government bonds was **adopted,** on **motion** by Dr. McNamee, seconded by Dr. Schriver and **carried.** The Council expressed itself as believing that no action could be taken at this time with respect to reinvestments, but that this matter should be considered at a subsequent meeting of The Council.

New Equipment—On motion by Dr. Schriver, seconded by Dr. Burley and **carried,** The Executive Secretary was authorized to purchase a new mimeograph for the State Headquarters Office from surplus funds of *The Journal.*

Publication Costs—On **motion** by Dr. Schriver, seconded by Dr. McNamee and **carried,** The Council **approved** an agreement between The Stoneman Press and *The Ohio State Medical Journal* for printing of *The Journal* during the ensuing year, which agreement called for a flat increase of $20.00 per month.

Following a discussion regarding the estimated income of the Association during the calendar year 1941 and necessary activities of the Association during the next 12 months, The Council, on **motion** by Dr. Sherburne, seconded by Dr. Burley and **carried, approved** the following budget for the calendar year 1941:

BUDGET FOR 1941

The Ohio State Medical Journal		$11,500
Executive Secretary, Salary		6,300
Executive Secretary, Expense		800
Asst. Exec. Secretary, Salary		4,800
Asst. Exec. Secretary, Expense		600
Stenographic and Clerical Salaries		2,640
President, Expense		500
Treasurer, Salary		300
Council, Expense		900
Public Relations and Economics		7,600
Committee	$2,000	
Bureau Director, Salary	3,600	
Bureau Director, Expense	500	
Bureau Operating Expense	1,500	
	$7,600	
Committee on Education		1,200
Miscellaneous Committees		500
Auditing and Appropriations Committee		100
Stationery and Supplies		1,200
Postage, Telephone, and Telegraph		2,000
Rent, Insurance, and Bonding		2,760
1941 Annual Meeting		500
Contribution Toward Entertainment for A.M.A. Meeting at Cleveland		1,600
Total		$45,800

There being no further business, The Council adjourned to meet at the call of the President.

Attest: CHARLES S. NELSON,
Executive Secretary.

Give 'Em the Third Degree

Dr. F. B. Kaylor, Bellefontaine, has reported to *The Journal* that his opthalmoscope and otoscope (both in the same box) were stolen from his office on December 6. Any physician who is approached to buy such an outfit should question the prospective seller carefully as to how he came into possession of it. Dr. Kaylor would appreciate receiving any information that would be helpful in locating the stolen instruments or apprehending the culprit.

Cincinnati—Dr. Thomas J. LeBlanc, professor of preventive medicine, University of Cincinnati College of Medicine, has been elected a member of the directing Council of the American Society of Tropical Medicine.

Do You Know - - -

According to Dr. R. H. Markwith, State Director of Health, serological examinations of 3,227 prospective draftees in Ohio up to November 30, showed 62 positives, or 1.9 per cent.

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New members of the executive board of the American Public Health Association include Dr. James A. Doull, professor of hygiene and public health, Western Reserve University School of Medicine, Cleveland.

* * *

Dr. Clarence D. Selby, medical consultant for the General Motors Corporation and former president of the Ohio State Medical Association has been appointed chairman of the sub-committee on industrial medicine of the Medical and Health Committee of the Council on National Defense.

* * *

As part of the National Defense program an evacuation hospital staff has been organized among the faculty of Ohio State University College of Medicine and the staff of University Hospital, comprising 28 medical and two dental officers, with Dr. John W. Means, professor of surgery, in charge of the unit.

* * *

Dr. Thomas A. Ratliff, assistant professor of psychiatry, University of Cincinnati College of Medicine, is one of 12 regional chairmen appointed by the Committee on Public Education of the American Psychiatric Association to cooperate with the press and otherwise to foster the dissemination of sound psychiatric information to the public. Ohio, Kentucky and Tennessee make up the region of which Dr. Ratliff is chairman.

* * *

Dr. Emily J. Widdecombe, Kent, was recently re-elected to serve her 25th consecutive term as secretary-treasurer of the Portage County Medical Society.

* * *

The first state trichinosis commission anywhere in the country was recently set up in New York to study the desirability of legislation to prevent feeding raw garbage to hogs.

* * *

The Ohio Public Health Association has announced the appointment of the following judges for its annual school newspaper contest in the writing of health articles: Dr. Jonathan Forman, editor, *The Ohio State Medical Journal;* Richard A. Aszling, director, Bureau of Public Education, Ohio State Medical Association, and Lester C. Getzloe, assistant professor, School of Journalism, Ohio State University.

National Social Hygiene Day will be observed on February 5, 1941, according to a recent announcement of the American Social Hygiene Association.

* * *

Dr. Derrick T. Vail, professor of ophthalmology, University of Cincinnati College of Medicine, has been named editor-in-chief and managing director of *The American Journal of Ophthalmology.*

* * *

At the recent annual meeting of the Michigan State Medical Society, the House of Delegates adopted a resolution providing for the establishment of a public relations department in the society's executive office at Lansing.

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Dr. Torald Sollman, dean of Western Reserve University School of Medicine, and Dr. J. T. M. Finney, professor emeritus of surgery of Johns Hopkins University, recently received the Degree of Merit of Nu Sigma Nu. Only seven persons have previously received this honor in the history of the fraternity.

* * *

President Winfred G. Leutner of Western Reserve University has announced a grant of $7800 a year for three years from the Commonwealth Fund of New York to be used for study of kidney disease by Dr. Joseph M. Hayman, Jr., professor of clinical medicine and therapeutics of the School of Medicine and the Frances Payne Bolton School of Nursing.

* * *

Marshall Dawson, who has been administrative advisor to the State Industrial Commission for one year while on leave of absence from the United States Bureau of Labor Statistics, has returned to his former post at Washington, D.C.

* * *

New officers of the Ohio State Dental Society are: Dr. William H. Wolford, Mansfield, president; Dr. Edward L. Ball, Cincinnati, president-elect; Dr. Thomas McDermott, Cleveland, vice-president; Dr. E. C. Mills, Columbus, secretary; and Dr. Robert M. Appleman, Columbus, treasurer.

* * *

Of the 174 state senators and representatives elected to the Ohio General Assembly in November, 51, approximately 30 per cent are lawyers.

* * *

Dr. Paul B. Beeson, Boston, Mass., formerly of Wooster, has been selected to be physician-in-chief for the American Red Cross-Harvard Hospital now being erected in southwest England.

Members of State Association Inducted Into Military Service Are Exempted From Payment of 1941 State Dues If Proper Certificate Is Filed by Local Secretary-Treasurer

As a tangible expression of appreciation on the part of the Ohio State Medical Association for the sacrifices which will be made by those members of the Association who are inducted for active service with the armed forces, The Council in regular session on December 8, 1940 (see Page 55), adopted the following resolution exempting inducted members from the payment of 1941 State Association dues:

"Resolved:

"1. That any member of the Ohio State Medical Association for the calendar year 1940 and any physician completing his medical education during 1940 or 1941, accepted as a member of a component society during 1941, who has been inducted into active military service, or is inducted during the calendar year 1941, shall be entered on the membership roster of the State Association for the year 1941 and shall not be assessed the annual per capita State Association dues.

"2. That the State Assocation shall refund 1941 annual dues which may have been paid by a member prior to his induction to the secretary-treasurer of his county medical society for adjustment with the member, or to the member direct in special instances.

"3. That the Executive Secretary shall be authorized to carry out the foregoing provisions upon receipt of the following certification, properly executed, from the secretary-treasurer of the component medical society to which the member belongs:

"This is to certify that ______________________________, a member of
(full name of member)

the ______________________________ County Medical Society, was inducted
(name of society)

into the military service on ______________________________ and is now on duty at
(date)

______________________________ and for that reason is eligible to
(name and location of army camp or post)

membership in the Ohio State Medical Association during the calendar year 1941 without the payment of annual per capita dues in that Association, in compliance with action of The Council of that Association on December 8, 1940.

____
(Name of Secretary-Treasurer)

____
(Name of County Medical Society)

"4. That the foregoing provisions shall not apply to former members of the Ohio State Medical Association who were not members in good standing during the calendar year 1940."

Bigger Job in Store for Medical Examiners As Selective Service Prepares To Fill Ohio's Next Quota of Draftees

ADDITIONAL work for medical examiners attached to Ohio's local draft boards may be anticipated after the first of the year when the Selective Service will be speeded up in order to meet Ohio's newest quota of draftees, amounting to 9,958 men.

In order to provide additional medical personnel at the training camps which will receive the draftees, the War Department is routinely ordering more medical reserve officers to report for active service. A call issued during December sent 47 Ohio physicians holding medical reserve commissions to training centers. Another call to be issued early in January will affect approximately 35 Ohio physicians. Present indications are that all Ohio medical reserve officers will be called on or before July 1, and those found physically fit will be in active service by that time. Attention is called to the statement issued by Surgeon General Magee of the U. S. Army, appended to this article, regarding the participation of the medical department in the military training program.

PROBLEMS BEING IRONED OUT

Under the direction of Lt. Col. H. E. Boucher, chief medical officer for Selective Service in Ohio, the difficulties and confusion which slowed up the medical examination work while draft boards were producing the state's first quota of draftees are being gradually ironed out. It is anticipated by Col. Boucher that the work will progress more smoothly during the January and subsequent calls.

During recent weeks, Major Claude S. Perry, U. S. Med. Res., Columbus physician, has been ordered on active duty as assistant to Col. Boucher at State Selective Service Headquarters where he will aid Col. Boucher in handling administrative details in connection with the duties of the local medical examiners. Dr. Perry is a member of the Committee on Medical Preparedness of the Ohio State Medical Association.

In localities where more medical personnel has been requested by draft boards and the regular medical examiners, additional medical examiners have been appointed by Governor Bricker after recommendations have been received from the medical preparedness committees of the county medical societies. These medical society committees have been cooperating in every possible way and have been providing indispensable help to Selective Service Headquarters.

REGULATIONS SHOULD BE FOLLOWED

Most of the complications which have arisen, according to Col. Boucher, have been due to failure on the part of some local draft boards and some examining physicians to familiarize themselves with the Selective Service Regulations, especially Volume No. 6 pertaining to physical examinations.

About 12 per cent of the draftees accepted by Ohio draft boards during November and December and sent to Induction Centers were rejected for physical disabilities. Army officials are not especially disturbed about this, according to Col. Boucher. He believes that this percentage will be reduced during future calls by which time the examining physicians will be more familiar with the regulations and have a better knowledge of what is expected of them. Also, it has been pointed out, that the medical examiners at the Induction Centers have been pretty severe in conducting the physical examinations, going on the theory that every effort should be made to get "perfect men" for the training camps as the trainees will be taken into the reserve and must be good military material during the next 10 years at least.

CONFERENCES ESSENTIAL

The Committee on Medical Preparedness of the Ohio State Medical Association has suggested to State Selective Service Headquarters that inspectors for that office urge local draft boards to hold frequent conferences with their respective examining physicians. In this way mutual problems can be discussed and misunderstandings ironed out with a minimum of confusion. Some of the troubles which are presented to the Selective Service Headquarters for solution could have been worked out locally between a board and its medical examiners if conferences had been held and a working understanding reached.

BAD TEETH CHIEF CAUSE

In a recent bulletin to local medical examiners, Col. Boucher pointed out that the principal cause of rejection for physical reasons at the Induction Centers was "insufficient teeth", this accounting for about 40 per cent of the total rejections, and that another chief cause for rejection was "chronic otitis media".

According to the regulations, the minimum for teeth is six masticating teeth (three above and three below opposing) and six incisors (three above and three below opposing). Natural teeth with cavities which may be restored by filling are to be considered as serviceable. Satisfactory fixed bridges or crowns are considered as natural teeth but plates and removable bridges are not and men with the latter are not acceptable, unless sufficient natural teeth are present.

In order to save loss of time for the prospective trainee who is rejected at an Induction Center and expense to the Government, medical examiners for local boards are being urged to be as careful as possible in making examinations and to request that doubtful or border-line cases be referred to a Medical Advisory Board for a check-up before completing the physical examination blank.

Since the original appointments of medical examiners and alternates were made, there have been some resignations, making replacements necessary. The committees on medical preparedness of the local medical societies, working through the Headquarters Office of the State Medical Association, have cooperated with State Selective Service Headquarters in getting substitutes and replacements.

WARNING SHOULD BE GIVEN

Col. Boucher has indicated that it would be a great help to Selective Service Headquarters if physicians who find it necessary to resign as medical examiners would not make their resignations effective until arrangements have been made for a replacement and would state their intentions to the chairman of the preparedness committee of the county medical society so that committee can give consideration to the matter of finding a replacement without unnecessary delay. Serious dislocation to the entire Selective Service machinery results when a physician resigns or goes on a vacation without adequate warning notice. In cases of enforced absence or illness, examiners are urged to arrange with other examiners to make necessary examinations or to solicit the assistance of colleagues who may not be examiners but who would be willing to help out in an emergency.

On the other hand, draft boards are being requested not to call in an excessive number of men for physical examination. Obviously, a board must have a sufficient number of men on hand to meet its quota but it should not overburden its medical examiners by asking them to examine many more men than will be needed for any one quota.

In a considerable number of communities arrangements are being made by the medical examiners of the various draft boards to form examining "teams". Under this plan a large group of draftees from the various boards is examined at a central place within the county during a stipulated period by this "team" of examining physicians. Reports indicate that this has simplified the work of the examining physicians. However, examining physicians may conduct examinations in their own offices on an individual basis if they care to do so.

OHIO PHYSICIANS TOTALING 8,208, OR 88 PER CENT, HAVE FILED A.M.A. QUESTIONNAIRE; FINAL DRIVE PLANNED BY PREPAREDNESS COMMITTEE

OHIO physicians numbering 8,208, or 88 per cent of the total number in the state, have completed the Medical Preparedness Questionnaire of the American Medical Association and returned the questionnaire to the Chicago office of the A.M.A., according to a tabulation made on December 18.

This information was reported to the Committee on Medical Preparedness of the Ohio State Medical Association at a meeting of the committee on Sunday, December 22, in Columbus. The percentage of returns as of December 18 from the entire country was 74.3 and for states comparable to Ohio as follows: California, 82; Illinois, 73; Indiana, 96; Massachusetts, 63; Michigan, 73; Missouri, 78; New Jersey, 75; New York, 61; Pennsylvania, 65 and Texas, 81.

During the first two weeks in January, a final drive will be made by the committee, working through the local committees on preparedness, to obtain blanks from the 1,130 Ohio physicians who have not completed the questionnaire. It was reported that the A.M.A. preparedness files will be closed probably about February 1 and that after that time, cards with incomplete data will be placed in the files for those who have not completed one of the regular blanks.

Major Frank J. Vokoun, medical instructor, Medical Reserve Corps, Ohio Military Area, and Lt. Col. H. E. Boucher, chief medical officer, Ohio Selective Service Headquarters, met with the committee. Major Vokoun discussed various questions pertaining to the mobilization of Ohio medical reserve officers, about 150 of whom are at present on active duty. He stated that plans have been made to call all of the remaining 450 to 500 medical reserve officers, who can meet the physical requirements, by next July under the peace time defense program, and sooner, in event of war. Major Vokoun revealed that efforts are being made to protect communities from being deprived of adequate medical service for civilians and to place interns on a deferred status, as well as residents who cannot be spared by institutions.

There was a discussion regarding a future need for specialists to staff the general hospitals which will be erected at training camps and the need after February 1 of physicians in private practice who will be willing to serve several weeks at induction centers where draftees will be given final physical examinations. Examinations at the induction centers are now being made by reserve officers but many of them will be sent to training camps during the next month or two.

Col. Boucher reviewed the medical procedure under Selective Service. He reported that in many communities, the medical examiners for various draft boards are forming "teams" for the examination of large groups of registrants at a central station at specified times. This plan, according to Col. Boucher, is working well where it has been tried, as it has lightened the burden of all examiners and has speeded up the work of the boards. It was suggested by Col. Boucher that physicians who may have to resign as examiner for good reason or who may be on extended absence could assist in keeping the selective service machinery moving smoothly if they would give warning of their intention to resign or of their absence, so that substitutes can be arranged for in advance. Col. Boucher stated that the Selective Service Office, through its inspectors, is endeavoring to get local draft boards to work closely on medical matters with the preparedness committee of the county medical society.

The committee discussed additional questions relating to the defense program as it affects the medical profession. Recommendations to local preparedness committees will be made from time to time in bulletins from the State Headquarters Office.

DATA ON PREVIOUS TREATMENTS SHOULD BE GIVEN TO REGISTRANTS ONLY

Several instances have arisen where physicians have been requested to furnish histories pertaining to treatment rendered at some time to a Selective Service registrant, the data to be used by the medical examiner in connection with the physical examination being given the prospective draftee.

Information in the files of a physician is confidential and should be furnished to no one except the individual who was treated unless by order of a court of competent jurisdiction.

Therefore, it is suggested that physicians should not furnish histories to examining physicians or draft boards. However, it would be proper and safe for a physician to furnish a registrant with a history or similar information upon receipt of a written request signed by the registrant.

ADDITIONAL OHIO MEDICAL RESERVE OFFICERS CALLED FOR ACTIVE DUTY; THOSE CHOSEN AND THEIR ASSIGNMENTS

SINCE December 1, additional Ohio medical reserve officers have received orders to report for one year's active duty. Those who have been called are listed below, together with place of assignment:

Carlisle Barracks, Pa., for a one-month refresher course, subsequently to **Camp Grant, Ill.**: Capt. George A. Tischler, Cleveland; Capt. Merwin R. Chappel, Athens; Capt. Charles J. Prochaska, South Euclid; Capt. Albert H. Herr, Cleveland; 1st Lt. Robert W. Stevens, Newark; 1st Lt. Norsuda M. Newport, Zanesville.

Carlisle Barracks, Pa., for a one-month refresher course, subsequently to **Camp Lee, Va.**: 1st Lt. Rosario G. Mannino, Newark; Capt. Francis M. Wadsworth, Mansfield; 1st Lt. Conrad K. Clippinger, Dayton; 1st Lt. Walter K. Gregg, Dayton; 1st Lt. Chas. C. Henrie, Celina; 1st Lt. Glenn H. Walker, Woodville; 1st Lt. Edward A. Zimmerman, Dayton.

Carlisle Barracks, Pa.: 1st Lt. Samuel Allen, East Liverpool.

Ft. Benjamin Harrison, Ind.: 1st Lt. Louis Pillersdorf, Cleveland; 1st Lt. Franklin R. Geiger, Cincinnati.

Ft. Jackson, S. C.: Capt. Peter C. Boylan, Cleveland Heights; 1st Lt. Carlos M. Larrick, Columbus; 1st Lt. Joseph I. Gould, Toledo; 1st Lt. Henry E. Hengen, Amherst; 1st Lt. Maurice M. Kane, Greenville; 1st Lt. A. Morton Karlan, Springfield; 1st Lt. Fred R. Kelly, Cleveland; 1st Lt. Harold A. Lotzoff, Lima; 1st Lt. Herman G. Rubin, Akron; 1st Lt. Ralph H. Shilling, Columbus; 1st Lt. Max S. Thomas, Akron; 1st Lt.

Thomas W. Watson, Wayne; 1st Lt. Benjamin F. Wills, McArthur; 1st Lt. Cyrus R. Wood, Port Clinton; 1st Lt. Ross R. Zeno, Akron; 1st Lt. Arthur T. Taskowski, Brunswick; Capt. Henry A. Burstein, Toledo.

Ft. Bragg, N. C.: Capt. Samuel C. Ellis, Xenia; 1st Lt. Harry O. Beeman, Port Clinton; 1st Lt. Wm. John Fornes, Lakewood; 1st Lt. Julien M. Goodman, Cleveland; 1st Lt. Wilford C. Lacock, Beaverdam; 1st Lt. Henry P. Limbacher, Lakewood; 1st Lt. Harry R. Mendelsohn, Cincinnati; Capt. Marshall M. Best, Xenia; Capt. Harold A. Erlenbach, New London; Capt. Herman C. Smith, Cleveland; 1st Lt. Harold J. Abrams, Cleveland Heights; 1st Lt. William R. Althoff, Dayton; 1st Lt. Alfred Breuer, Cleveland Heights; 1st Lt. Gregory G. Floridis, Dayton; 1st Lt. Joseph A. Radecki, Toledo; 1st Lt. Asher Randell, Youngstown; 1st Lt. Lawrence Rayman, Toledo; 1st Lt. Jay P. Roller, Luckey; 1st Lt. Robert J. Sating, Cleveland Heights; 1st Lt. John R. Seesholtz, Toledo; 1st Lt. Joseph L. Shepard, Coolville; 1st Lt. Jack Srulowitz, Belpre; 1st Lt. Herbert R. Stockwell, Dayton; 1st Lt. Norman W. Thiessen, Cleveland; 1st Lt. Harry S. Tucker, Cleveland; 1st Lt. Andrew J. Lamb, Shaker Heights; 1st Lt. William I. Waters, Dayton.

State Selective Service Headquarters, Columbus: Major Claude S. Perry, Columbus.

Camp Shelby, Miss: Captain Harold Barker, Cleveland Heights; 1st Lt. Neil M. Burr, Cleveland; Capt. Elmon Collette, Cleveland; 1st Lt. William T. Gordon, Cincinnati; Capt. Peter F. Gulmi, Cleveland.

Fort Hayes, Columbus: 1st Lt. Frank H. Harris, Martins Ferry.

Fort Thomas, Ky.: 1st Lt. Morris M. Kessler, Cleveland Heights; 1st Lt. Elmer G. Sternberg, Cincinnati.

Patterson Field, Dayton: 1st Lt. Herbert Jacobs, Cleveland.

Surgeon General's Office, Washington, D. C.: Capt. Abraham Alfred Golden, Akron.

ANOTHER MEDICAL UNIT CALLED

Another medical detachment of the Ohio National Guard has been ordered to Camp McClellan, Alabama, for a year's active service, effective on or about January 6. This is the 151st Medical Battalion with headquarters at Akron. The battalion is not recruited to full strength at this time but expects to be by January 6. The commissioned officers of the various units of the battalion at present are:

Headquarters—Lt. Col. H. E. Groom, Akron; Major Y. N. Pitkin, Cleveland.

Headquarters Detachment—Capt. W. Farver, 1st Lt. Hubert Short, and 1st Lt. Roy E. Brooks, Akron.

Collecting Co. A—Capt. Donald Traul, Akron; Capt. Robert E. Grigsby, Cincinnati; 1st Lt. Emmet Bernel, Akron, and 1st Lt. John T. Smiley, Akron.

Collecting Co. B—Capt. David Shallenberger, Cleveland; 1st Lt. R. J. Fitzsimmons, Columbus.

Collecting Co. C—Capt. Howard W. Brettell, Steubenville.

Clearing Company—Capt. Charles E. Howe, Westerville; 1st Lt. Adam Kreps, Akron.

Remaining medical units of the National Guard, those at Cincinnati, Cleveland, and Columbus, have not as yet been given orders to report for active service but may be called sometime during January.

SURGEON GENERAL OF ARMY OUTLINES ROLE OF MEDICAL PROFESSION IN THE MILITARY TRAINING PROGRAM

An outline regarding the participation of the Medical Department of the U. S. Army in the present military training program was furnished recently by Surgeon General Magee of the Army to the American Medical Association and published in a recent issue of *The Journal of the American Medical Association.* This timely statement is of great interest to the medical profession at large. For that reason it is reproduced in part as follows for the benefit of Ohio physicians who may not have read it in *The Journal of the A.M.A.*:

The total strength of the Army of the United States next Spring will be approximately 1,400,000. This represents a Regular Army of 400,000 officers and men, the National Guard of the several states federalized as the National Guard of the United States, numbering 200,000 and citizens selected for military training during the coming twelve months—about 800,000 in number. The latter will receive their training in active units of the Regular Army and of the National Guard, in Regular Army inactive units activated for training purposes, in the numerous installations required for the overhead of these forces and in Enlisted Replacement Centers throughout the nine corps areas of the country.

HOSPITAL FACILITIES

The Medical Department is charged with providing adequate medical service for the entire Army of the United States at posts, camps, and stations within and beyond the continental limits of the United States. In each military station in the United States there will be a hospital with four beds for each 100 of the military population. The operating room, kitchen, messing facilities, and clinics in each of these hospitals will be of sufficient size to provide service for an additional one patient per 100 men so that in an emergency it will be necessary to construct only the additional ward buildings. Furthermore, there will be general hospitals suitably located throughout the United States to provide an additional one bed per 100 of the military population.

The provision of five per cent of hospital beds which can be rapidly expanded to six per cent may appear excessive when compared with hospitalization provided for the civilian population of this country. However, all of the military sick, including such cases as in civilian life are ordinarily cared for in their home, must be treated in hospital since they cannot receive satisfactory care in the barracks. In addition, when young adults are brought together in large groups contagious and infectious diseases that spread rapidly under such conditions occur much more frequently than in civil life. Furthermore, sufficient beds must be provided for the care of the sick during the Winter and Spring seasons of the year when there is always an excessive number of such cases.

OTHER SERVICES

Scattered throughout the large camps or stations there will be dispensary buildings and dental clinics for the infirmary care and dental treatment of the personnel. In addition, in each large camp there will be a medical headquarters, with properly qualified scientists for the general supervision of the medical activities, including the protection of the health of the troops, the careful inspection of food products, and the general supervision of the nutrition of the men.

The Medical Department will be charged with the training of the Medical Detachments and the Medical Department Units of the Regular Army and the National Guard, and with the instruction of the service personnel in hospitals and other installations. It is also responsible for the preparation of the trainees in Enlisted Replacement Centers, in hospitals and in service schools, who will receive there the individual Medical Department instruction which will permit their incorporation in organizations for further unit training.

NUMBER OF PHYSICIANS NEEDED

The initial requirement will be approximately 6.5 doctors for each 1,000 men in the military service. Rapid calculation will show that the total number for an Army of 1,400,000 men will be 9,100 doctors. Additional ones may be required, but in the interest of economy the initial procurement will be limited to the number stated. The 1,200 physicians in the Regular Army and the 1,100 in the National Guard are included in the total, leaving approximately 6,800 physicians to be supplied by the Reserve Corps. There are now approximately 1,500 Reserve physicians on duty, leaving 5,300 to be procured during the next few months.

Under the present Joint Resolution passed by the 76th Congress, the President is authorized to order into the active military service of the United States for a period of twelve consecutive months each, any or all members of any Reserve component of the Army of the United States, with or without their consent, to such extent and in such manner as he may deem necessary for the strengthening of the National Defense. If a sufficient number of officers do not indicate their availability for this service, Reserve officers must necessarily be ordered to duty without their consent. Additional appointments among physicians of draft age will increase the strength of the Medical Corps Reserve. However, it is apparent that a very large percentage of these officers must participate actively in the present program for preparing a portion of the country's man power for National Defense.

WILL BE CIRCULARIZED

In establishing rosters from which officers will be ordered to duty, Corps Area Commanders and Chiefs of Branches have been instructed to circularize all Reserve officers under their assignment jurisdiction to permit them to state the amount of deferment desired and the cogent, pertinent reasons for such deferment in the event that they are not immediately available for military service. This action has been taken in view of the fact that a national emergency has not been declared by the Congress, nor has mobilization been ordered. The medical service of a training program, although essential to national preparedness, possesses none of the glamour of the same service during actual military operations; it is, however, equally important. Indeed, military training may, through the thoroughness of its preparation for war, materially assist in preventing the necessity of participation in military operations. It is realized, of course, that all officers would express their immediate availability in the event of war; many, however, feel that their services are not of national importance at the present time.

Both the economic and the rational utilization of medical officers is essential. It is planned that in as far as possible qualified officers will be selected for assignment to duty with units and at installations according to their previous training and experience. Accordingly, selection must be qualitative as well as quantitative in order that the specific requirements of a modern medical service may be properly met. Officers selected for duty will be given the maximum possible advance notice of such action.

SOME IMPORTANT POINTS

In this connection the Surgeon General has suggested that the following points be brought to the attention of all Reserve medical officers:

1. When notified that you have been selected for active duty, submit at once the required report of physical examination. The disclosure of disqualifying defects prior to the issuance of orders may prevent a disruption of your practice or civil employment.

2. Orders issued will place you on active duty at your home or, if a temporary change of address has been submitted, at that location, and will direct you to report to a specific post, camp, or station for duty.

3. Travel to your station may be accomplished by automobile but no delay will be granted for that purpose above the customary time for travel by rail.

4. You will be reimbursed for travel at the rate of 8¢ a mile, based on the shortest usual railway route to your station.

5. Transportation for dependents to your first station will not be furnished by the Government. It is perhaps advisable that your family not accompany you since the housing problem at or within the vicinity of Army stations is frequently acute.

6. If you have no uniform and military equipment, these may be purchased at your first station.

PAY AND ALLOWANCES

Pay and allowances are as shown in the following table:

		ALLOWANCES			
		Rental Allowance		Subsistence Allowance (30 days)	
GRADE	ANNUAL BASE PAY	With Dependents	Without Dependents	With Dependents	Without Dependents
Colonel	$4,000	$120	$80	$36	$18
Lieut. Col.	3,500	120	80	54	18
Major	3,000	100	60	54	18
Captain	2,400	80	60	36	18
1st Lieut.	2,000	60	40	36	18

The annual base pay is increased at the rate of 5 per centum thereof for each three years of service up to 30 years. Full time will be computed for all periods during which they have held commissions as officers in the Army, Navy, Marine Corps, Coast Guard, Coast and Geodetic Survey, and Public Health Service, or in the National Guard or Naval Militia, the National Naval Volunteers, or in the Naval Reserve Force or Marine Corps Reserve, when confirmed in grade and qualified for all general service, and with full time for all periods during which they have performed active duty under Reserve commissions, and with one-half time for all other periods during which they have held Reserve commissions.

NOT EXEMPT AS A GROUP

Physicians as a group will not be exempt from conscription for military training and service. Their deferment because of importance to civil communities is a function of the Local Draft Boards. Accordingly, it is difficult to approximate the number which will be inducted into the Army. Obviously, the training received by such draftees will be more appropriate and the services rendered the Army of greater value if the physicians who are eligible and qualified for appointment in the Medical Corps Reserve be commissioned in the Officers Reserve Corps for duty as medical officers, rather than continue their training as enlisted men.

Physically qualified graduates of approved schools of medicine who desire appointment in the Medical Corps Reserve for immediate active duty should make application to the Commanding General of the Corps Area in which they reside. Such applications may be submitted either before or after selection for military training and service, or after induction into the Army of the United States. No change in the classification of such applicants will, however, be made by local selective service boards, until the actual letter of appointment has been received.

Appointments in the Medical Corps of the Regular Army will, in all probability, continue as at present through competitive examinations of Reserve officers who have not passed the age of 32 years at the time of appointment.

Coming Meetings

American Medical Association, Cleveland, June 2-6.

American College of Physicians, Boston, April 21-25.

American Congress on Industrial Health, Chicago, Jan. 13-15.

American Association of Anatomists, Chicago, April 9-11.

American Association of Pathologists and Bacteriologists, New York, April 10-11.

American College of Physical Therapy, Washington, D. C., Sept. 1-5.

American Gastro-Enterological Association, Atlantic City, May 5-6.

American Roentgen Ray Society, Cincinnati, Oct. 6-11.

American Society for Clinical Investigation, Atlantic City, May 5.

American Urological Association, Colorado Springs, May 19-22.

Cleveland Health Museum, Dream of Academy, Is Officially Opened

A three-day program, November 12-14, heralded the official opening of the Cleveland Health Museum at 8811 Euclid Avenue, Cleveland, the former Prentiss home which was donated to the trustees of the Museum by Mrs. F. F. Prentiss. It is said to be the first permanent museum devoted entirely to health in the United States.

The Museum, a long cherished dream of Cleveland physicians and others interested in the health of the public, was proposed originally by the Health Education Committee of the Cleveland Academy of Medicine on March 25, 1936, when representatives of 23 Cleveland institutions met with representatives of the Academy to discuss a permanent home for health education. On December 7, 1936, Mrs. Prentiss expressed willingness to give her former home as a home for the Museum.

On December 28, 1936, the Museum was incorporated by Dr. Lester Taylor, then president of the Academy, Dr. James A. Doull, Dr. Hubert C. King, Howard Whipple Green and H. Van Y. Caldwell. A Board of Trustees and an advisory committee, consisting largely of physicians named by the Academy, was appointed to guide the technical and professional aspects of the Museum. Following the presentation of the property by Mrs. Prentiss, 650 members of the Academy and the Cleveland Dental Society were enrolled as professional members, and a financial campaign was begun.

During the past Summer the building was remodeled to include an auditorium seating 350 on the third floor, and work shops and additional exhibit space in the basement. The first floor, with modern exhibit facilities, will contain permanent exhibits on human biology, and the second floor will be used for temporary or mobile exhibits. Most of the 133 exhibits displayed at the opening were made in the Museum's own shops. Many are animated and include audience participation.

The Director is Dr. Bruno Gebhard, originally curator of the Hygiene Museum in Dresden whose first visit to this country was in 1934 upon invitation of the American Public Health Association for the purpose of promoting health exhibits activities. He was technical consultant for the medical and public health exhibits at the New York World's Fair.

Dr. James A. Doull was master of ceremonies at the preview on November 12. Speakers included Dr. Lester Taylor and Dr. Gebhard. Greetings were presented by representatives of various interested organizations. The Cleveland Chamber of Commerce sponsored a civic luncheon November 13, at which one of the addresses was "Pictures of Health" by Dr. W. W. Bauer, director of health education of the American Medical Association.

The purpose of the Museum are: To spread definite knowledge of unquestioned accuracy; lead more people to a better understanding of the progress in medical science; sharpen consciences with respect to public health; be a center for health education techniques and be a center of research on problems of personal health and hygiene.

Admission is free and the Museum is open from 10 A.M. to 4 P.M. week days, and may be opened for special groups on Sundays and evenings.

A limited edition of souvenior booklets of the opening, including descriptive titles of the 133 exhibits is available as long as the supply lasts. Requests should be addressed to the Cleveland Health Museum, 8811 Euclid Ave., Cleveland.

New Orthopedist on Staff at State Industrial Commission

Dr. Albert R. Smith, for the past five years associated with Dr. Arthur Steindler's Clinic at University Hospitals, Iowa City, Iowa, has been appointed orthopedist in the Medical Section of the State Industrial Commission.

A graduate of the College of Liberal Arts of the University of Wisconsin in 1930, Dr. Smith obtained a M.Sc. degree in biological chemistry from the same institution in 1932, and his M.D. from Duke University School of Medicine, Durham, N. C., in 1934. The following year he served an internship in pathology and general surgery at Duke Hospital. From July 1, 1935 to July 1, 1937 Dr. Smith was assistant resident in orthopedic surgery at University Hospitals, Iowa City, continuing as resident the following year and as assistant orthopedist for the past two years.

In his new post Dr. Smith succeeds Dr. Clyde W. Dawson who has entered private practice in Columbus in association with Dr. Judson D. Wilson.

Money Available for Research

The Committee on Scientific Research of the American Medical Association invites applications for grants of money to aid in research on problems bearing more or less directly on clinical medicine. Preference is given to requests for moderate amounts to meet specific needs. Application forms may be obtained by addressing the Committee, 535 North Dearborn Street, Chicago.

Recent promotions in the faculty of the University of Cincinnati College of Medicine include the advancement in rank from assistant professor to the positions indicated: Dr. A. R. Vonderahe, associate professor of anatomy; Dr. John H. Skavlem, associate professor of medicine; Dr. Leon Schiff, associate professor of medicine.

Message from the President

HARD WORK CONFRONTS US DURING THE ENSUING YEAR

By WM. M. SKIPP, M.D., YOUNGSTOWN

WE hope that every member of the Ohio State Medical Association had a pleasant holiday season and we wish for all a most successful 1941.

Your Association has increased its activities in the year which has just closed and looks forward to another very active and beneficial year.

The Association has dealt with many grave problems during the past twelve months but many questions of importance are still unsolved. However, with diligent and earnest effort, the answers will be found for many of these as we have an active and alert Council, hard-working committees, an efficient executive office, and a membership which is fully aware that the real strength of our Association lies in the interest and activity of the members.

MUST WORK IN UNISON

We must work in unison if we are to adequately meet the many situations confronting the medical profession of Ohio. This task can not be accomplished by a few of our total membership. All must be willing to do their part and never let it be said we are not interested in the welfare of our profession.

The membership of the Association has gradually increased, showing that the profession as a whole believes and understands that as a state unit we can perform and do things that can not be touched or even undertaken if only attempted by a single member or a separate county organization. As such we can and will go forward.

LEGISLATIVE ACTIVITIES

The State Legislature will convene within a few days. In the Senate and House will be men and women who are obligated to serve the best interests of the citizens of Ohio. It will be their sworn duty to see that no laws are passed that will interfere with the health and happiness of the people, but to enact laws which will be beneficial to our citizens. It is our duty as citizens and doctors of medicine to see that our lawmakers are properly informed and advised so that the health of the public is protected. It is also our duty to support medical and health proposals which will be of direct benefit to the people.

This, as stated many times, is not just the job of a state or county committeeman or a county society, but it is the duty of each and every member of the profession. Each member must assume the responsibility for seeing that proposed legislation, whether sponsored or opposed by the Association is thoroughly understood by members of the profession, the members of the Legislature, and the public.

You as a member of a county society may be called to undertake a special task. For the sake of the profession and its relations with the public, do the job at once with earnestness and zeal. Do not put it off until a later date, for that may be too late. Remember, this is not a one-man affair. Each member must be willing to assist and must help if we are to produce results.

THE PUBLIC WILL BENEFIT

The people of Ohio are asking for a better distribution of medical services and resources. It is our responsibility to come to their aid by offering a method whereby they can systematically budget the cost of necessary medical services. If we do not meet this responsibility, government or lay agencies will attempt to do so. Neither the public nor the medical profession can afford to let this happen.

Let me urge you to give your time until it hurts. I know how busy you are, but don't run the risk of having to state at some future date that you are sorry you did not do your part before it was too late.

To make our present plans actually become realities, we must persuade our State Legislature to enact enabling legislation so that medical service plans for those of the low-income group can be established by the medical profession where such plans are needed and the people are anxious to receive the benefits of such plans.

McNutt Named Coordinator

Coordination of all health, welfare and similar activities of the national defense program were assigned to Paul V. McNutt, Federal Security Administrator, in an order issued December 3 by the Council of National Defense, with the approval of President Roosevelt.

Under the order McNutt, cooperating with the defense commission, will supervise health, medical, welfare, nutrition, recreation and other related fields of activity affecting national defense. The health and medical committee established by the defense commission on September 19 was transferred to the Federal Security Agency.

What? Why? How? Who?

TIMELY QUESTIONS AND ANSWERS ABOUT MEDICAL SERVICE PLANS AND THE OHIO ENABLING ACT TO BE SPONSORED BY THE OHIO STATE MEDICAL ASSOCIATION IN THE 1941 LEGISLATURE

New Questions and Answers Each Month

THIS is the fourth of a series of questions and answers on Medical Service Plans and the Ohio Enabling Act, which is being sponsored by the Ohio State Medical Association, in the 1941 session of the General Assembly. In presenting this monthly feature, The Journal is attempting to give all members information which will be useful to them in mobilizing support for the enabling bill.

* * *

10. What services would a subscriber receive?

Kinds and the scope of services provided by medical service plans vary, depending on the regulations governing each plan. As a typical example, following are the benefits provided by a medical service plan in operation in a neighboring state. Medical and surgical care, including home, office and hospital visits; consultation services by specialists; special services such as X-ray, laboratory and anesthesia; obstetrical services after membership for 12 consecutive months; medical services necessary to establish a diagnosis for tuberculosis, venereal diseases, cancer, and nervous or mental conditions.

11. Are there limitations or restrictions on the amount of services?

Obviously, there have to be some restrictions to bring the cost of the plan within the incomes of the eligible subscribers but as few restrictions as possible are provided in a typical medical service plan. Here are the limitations and restrictions of one plan now operating in another state: The subscriber must pay the first $5.00 incurred in any one year for medical service, to safeguard the plan against excessive demands for trivial services. After the first $5.00 is paid by the subscriber, he is entitled in any one subscription year up to $325 worth of services. In cases of families, this amount is $550 for husband and wife, and $875 for husband, wife and minor children. Dental care, nursing services and hospitalization are **not** included. Surgical treatment of hernia which existed prior to obtaining membership and for appendicitis if the subscriber had one or more attacks before subscribing is **not** provided. Services are **not** provided for alcoholism, drug addiction, self-inflicted injuries or for conditions where compensation for medical services is available to the subscriber without cost under laws or regulations of federal, state or municipal agencies. These are simply examples. The exceptions of each plan are covered in the regulations of that particular plan.

12. How much does a subscriber have to pay?

Premiums may vary according to the benefits provided. One plan which is proving successful charges the following monthly premiums: Individual, $2.00; husband and wife, $3.50; and family (husband, wife and minor children up to 19 years), $4.50.

13. How are medical fees established and paid?

A schedule of fees for services rendered to subscribers is set up by the corporation operating the medical service plan following conferences and agreements with physicians. Physicians render bills to the corporation according to the fee schedule. Fees are paid directly to the physician by the corporation.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Industrial Commission Gives Dilatory Doctor Another Chance

Members of the State Medical Association who handle Workmen's Compensation cases will be vitally interested in the important notice appearing opposite page 64 of this issue. It should be read carefully and its provisions complied with. In effect, the State Industrial Commission's regulation, presented in full in the article referred to, provides that physicians' fee bills not submitted within two years of the date services were rendered will not be paid by the Commission. **The regulation takes effect on February 1, 1941. Physicians who have not submitted fee bills for two years or more after the date services were rendered to a claimant should send such fee bills to the Commission on or before January 31 or they will be barred under the regulation.**

This action by the Commission was taken originally last August 9, and the deadline of October 1 was established. However, confusion and complications developed because no particular effort was made to notify physicians. Some physicians were penalized because they did not know of the Commission's action. **Incidentally, physicians who may have had a fee bill rejected because the bill was not submitted by October 1 should write the Claims Division of the Commission, giving the number of the claim, citing the extension of time allowed by the Commission on December 18, and asking reconsideration of any such fee bill.**

When the Headquarters Office of the State Medical Association took up this matter with the Commission and requested an extension of time for the filing of two-year-old bills so that proper notice could be broadcast to the medical profession, the Commission by unanimous vote readily consented. This is further proof of the existing attitude of the Commission in desiring to be fair and reasonable in its dealings with members of the medical profession and others affected by the Workmen's Compensation Act. In our opinion, the Commission merits a vote of thanks for its considerate action and fairness on this matter. Continued cooperation between the Commission and the medical profession is possible under such conditions.

We believe we would be remiss if we did not conclude by making the frank statement that we can see no good reason why any physician should delay as long as two years in filing a fee bill with the State Industrial Commission. This is hardly a businesslike procedure. Goodness knows, the average physician has to wait too long for his fees in his daily practice, so he should not add to his troubles by being dilatory and careless in his bookkeeping and billing.

There is another side to the picture. The Industrial Commission can not be expected to do an efficient job—not the kind of job it wants to do—**if it has to wait for weeks, months and even years on reports and information, including fee bills of physicians.** Under the law, the Commission as custodian of the Workmen's Compensation fund is obligated to check, analyze and approve all expenditures. This can not be done satisfactorily years after services were rendered.

The regulation adopted by the Commission is sound. It should be enforced. The Commission has been fair in agreeing to extend the period of grace. The least physicians can do to show appreciation for this attitude of the Commission is to comply with this regulation, as well as all others which are so necessary for efficient administration of the Workmen's Compensation system.

Let the study of medical ethics and their promulgation be made a New Year's Resolution. A keener sense of responsibility will be the result.—Minnesota Medicine.

Fate of Enabling Act Is Vital to Every Physician in Ohio

Finishing touches are being given to the proposed Enabling Act for Medical Service Plans which the Ohio State Medical Association will sponsor in the 1941 session of the Ohio General Assembly, starting January 6. If the medical profession of Ohio does its part well, there is every reason to believe that this proposal, which is one of the most important the profession has ever sponsored, will be enacted. The proposal has caught on with the public. Its purposes are good and in the interests of the public. The bill itself has been drafted carefully and leaves no room for misunderstanding or misinterpretation.

There are two points in particular which must be kept in mind by the medical profession:

1. The bill won't get to first base unless the profession gives it momentum. A few officers and committeemen of the State Association or of a

county medical society can't produce enough energy to do the job. This bill needs the active support and backing of all physicians. All physicians will have to do their part by helping to convince members of the Legislature that it should be enacted.

2. Petty differences of opinion with respect to this provision or that section of the bill must be avoided. One piece of legislation can't possibly contain the personal views of all of 9,000 physicians. General principles which are sound and workable have been agreed upon. These should be retained but changes in the proposal simply to meet the whims or opinions of one or several individuals should be rejected. This situation has not arisen and we hope it won't. We mention it simply because we believe it is something which must be avoided in order to prevent disaster to the bill itself.

We have never seen the medical profession in Ohio more thoroughly united than it is today. We have never seen so many physicians as enthusiastic about a piece of legislation as they are about the proposed Enabling Act, realizing that it offers a real solution for some of the medical problems of many Ohioans. Let's keep this spirit alive. Let's win the support of every member of the General Assembly for this measure.

We urge all county Farm Bureaus and others to study the question of cooperative medicine and hospital associations, including the possibilities of early venture into this type of service. Also, we recommend that the Ohio Farm Bureau seek proper legislation to enable the establishment of such associations.—Report of Resolutions Committee, 1940 Ohio Farm Bureau Convention, Columbus, O.

Every Physician Must Have the Facts and Do the Answering

Popular interest in the problem of medical care distribution has not diminished during the present world emergency. On the contrary, it appears that at the present time there is a greater demand for information about the facts of medical economics than ever before. As a single evidence of this we point to the fact that the National League of Women Voters has assembled a kit of materials for use by its study groups in public health, the title of which is "Federal Responsibility for Health and Health Insurance."

Included in the packet is literature on all phases of the problem—from the Federal Government, from groups sworn to "socialize" medicine, and from the American Medical Association. Some may feel that material from the first two sources tends to overbalance or outweigh that from the last named. If that is the case, a real responsibility is placed on local physicians who must see that members of the organization are provided with adequate information on Medicine's point of view.

The inescapable moral to this story is that the average doctor of medicine these days is obliged to become a source of sound information about things other than ills and their treatment. The individual physician owes it to himself and his profession to keep abreast of developments in the field of medical ecomonics so that he can answer the questions of his friends, patients, and neighbors. If he doesn't, Medicine's answer to many of these pertinent questions may go begging, and the answers of laymen, with only half-truths at their command, may supplant it.

No question about it. The public wants to hear from the medical profession. You can get the material on which to base your answers from the Bureau of Public Education of the State Association, but you must do the answering yourself.

Add similes of 1940: As unstable as the status quo.—Dallas Morning News.

Conferences Pertaining to N.Y.A. Health Project in Ohio Being Arranged

The National Youth Administration of Ohio has requested the assistance of the Ohio State Medical Association in starting a health program for 10,000 to 11,000 boys and girls who are participating in the N.Y.A. program in this state.

The Council of the State Association has offered to work with N.Y.A. officials in setting forth general policies for such a program. In fact, more than one year ago a similar offer was made but the project was not mentioned again until early last December, so of course no plans have been drafted and no agreement has been reached as to principles or details.

A sound and properly conducted health program for N.Y.A. youth undoubtedly is needed. Such a program must have competent direction and guidance by the medical profession. As soon as the right kind of program has been agreed upon, it should have the support of the medical profession generally. However, such a program cannot be thrown together hurriedly and without studious consideration.

The Committee on Public Relations and Economics of the State Association has been delegated by The Council to act as a liaison between the Association and the N.Y.A. That committee has a reputation of doing a thorough job on such matters. It will give the N.Y.A. leaders good advice and active assistance. Conferences are

NOW'S THE TIME TO BECOME FELLOW OF THE A.M.A.!

Since the 1941 session of the American Medical Association will be held in Cleveland next June 2-6, every eligible Ohio physician will want to attend as many sessions as possible of that great medical gathering. To be "eligible" to attend, a physician must be a Fellow of the A.M.A. Right now is the time for each physician to take care of this important matter by making formal application for Fellowship by writing directly to the American Medical Association, Chicago. Every member of the American Medical Association (every member of the Ohio State Medical Association) is eligible to apply for Fellowship. Cost of Fellowship is $8.00 per year, the same as the subscription to The Journal of the A.M.A. and when a physician becomes a Fellow he receives The Journal of the A.M.A. free.

OHIO DOCTORS SHOULD APPLY NOW FOR FELLOWSHIP IN THE A.M.A.

being arranged and no doubt they will produce tangible results in the form of a workable program. As soon as agreements have been reached and a preliminary program drafted, the various county medical societies will be provided with proper information for their guidance and urging their cooperation. Obviously, local programs cannot be started until general policies have been agreed upon by the State Association and the N.Y.A.

Nothing will ever be attempted if all possible objections must first be overcome.—Dr. Samuel Johnson.

Basic Policy Regarding Choice of Physician Again Vindicated

We don't know a thing about a current controversy taking place in Cleveland "except what we read in the papers" and don't intend to get mixed up in it but we were rather pleased with a slant taken by the *Cleveland Press* in an editorial comment.

Here's what *The Press* said and we believe the editorial presents enough facts to give the reader an understanding of the question in controversy—we know that it advocates a policy which is sound:

"So far as we know, it is not customary among accident insurance companies to provide that, if the insurance is to be collected, treatment must be provided by a particular doctor.

"It now appears, however, that the Cleveland school fund for injured athletes does not provide any help unless the athlete gets his doctoring at the hands of one medical firm.

"As a result, a widowed mother of an injured player from Cathedral Latin School is confronted with a bill for $740.

"It is true that the contract signed by parents of players with the fund stipulates that treatment must be given by the specified firm of doctors. We should think that, in the light of this experience, the school administration might wish to change its rules to conform more closely with the usual practice of accident insurance companies and protective funds.

"A good place to start would be to waive the rule in the case of this woman and her son.

"Through its committee on medical economics, the Academy of Medicine several years ago advised the School Board that beneficiaries of this fund should be allowed to choose their own physicians. The committee pointed out then that such case as this was bound to arise sometime under the board's rule.

"The academy's advice should have been accepted by the School Board when it was tendered. It should be accepted now."

Imagination was given to man to compensate him for what he is not—a sense of humor was provided to console him for what he is.—Wall Street Journal.

Newspaper Editor Offers Medicine Some Good Advice

Friendliness toward the medical profession tempered by an occasional word of caution or advice to local medical societies is—thank goodness!—the editorial policy of all leading Ohio newspapers. Under the heading "Changing Medicine" the *Dayton Herald* recently editorialized about a medical society election in another state, where the victory of the "conservatives" was interpreted to mean the organization was not interested in studying methods for better distribution of medical care.

The editorial concluded with this important food for thought:

"Doctors themselves can run their societies in any way they please, and the conservatives can outvote the progressives as often as they please. But they do so to their peril when more and more lay groups, in response to widespread public demand, seek ways and means of providing more adequate medical care for larger masses of the people at more reasonable cost. Sick men and sick women do not cast their votes in medical society elections, but they do at the polls.

"And it would be a pity, it seems to us, if the changes which are bound to come in the practice of medicine must be brought about by laymen rather than by our doctors, who could surely do it better—if they would."

Since the above was published the editors of *The Herald* have been informed about the proposed Enabling Act for Medical Service Plans sponsored by the Ohio State Medical Association. Judging from the sentiments expressed in the editorial, *The Herald* undoubtedly will be pleased to know that the medical profession in Ohio is endeavoring to lead in bringing about desirable readjustments in methods of distributing medical care and in the relationships between the profession and the public.

The man who is worthy of being a leader of men will never complain of the stupidity of his helpers, of the ingratitude of mankind, or of the inappreciation of the public. These things are all a part of the great game of life, and to meet them and not go down before them in discouragement and defeat, is the final proof of power.—Elbert Hubbard.

Present Relief Act O.K.—Should Not Be Tinkered With

At a recent conference in Columbus of local relief administrators, there appeared to be general agreement that the present State Relief Act is basically sound and that only minor changes should be recommended to the General Assembly. This opinion was concurred in by State Welfare Director Sherwood, administrator of relief.

In general, the present State Relief Act is the best relief law which this state has had. It places administration of relief where it should be—in the hands of competent local officials. Perhaps some amendments to clarify certain provisions may be needed. On the other hand, it would be a mistake, in our opinion, for the Legislature to engage in wholesale tinkering with this measure.

Whatever flaws there may be in the relief program in Ohio (and there are some) are not because of weaknesses in the relief act which is primarily an administrative measure. The biggest difficulty is one of finances. For example, in few communities have funds allocated for medical care been adequate.

The question of finances must be considered entirely apart from the question of administration. Financing is partly a state problem, partly a local problem. From all sources, a reasonable amount of money for financing medical care must be made available. Local relief officials have the authority to budget their funds and they must be impressed with the importance of seeing that medical care for the poor is properly financed. This is the job of the county medical society. The State Association's responsibility is to urge the Legislature to provide reasonable financial assistance from state revenues.

As already stated, administrative changes appear to be unnecessary. On the other hand, the question of financing deserves study by the General Assembly.

CARRY THE LITTLE CARD IN YOUR POCKET AND USE IT

A small printed card-holder will accompany every 1941 membership card mailed from the headquarters of the State Association. This little pasteboard, if put to the use for which it is intended, can become a potent weapon in working to secure passage of the Enabling Act for Medical Service Plans, being sponsored in the State Legislature by the State Association.

One side of this card lists 10 important reasons why this bill should be enacted. If every physician who receives it would carry it in his vest pocket and utilize it as an outline for his discussions of the proposal, he would find it a simple matter to present the "whys and wherefores" of the State Association's bill in a three-minute conversation. If Ohio doctors will take the trouble to make this explanatory presentation to the laymen they meet in their daily rounds, a powerful body of public opinion will be built up in favor of passing the Enabling Act.

Carry the little card in your pocket and use it!

Toledo—Dr. John L. Lavan, formerly local health commissioner, and health commissioner at Grand Rapids, Mich., for the past five years, has been appointed director of the new Toledo Health District. The appointment was made by the local board of health, of which Dr. Edward J. McCormick is president.

Sixty-two Medical Graduates Take Examinations Given By State Board; Questions Asked the Applicants

SIXTY-TWO medical school graduates were examined for licenses to practice medicine and surgery in Ohio, at the Mid-Winter meeting of the State Medical Board, December 10-12, at Columbus.

Licenses to practice osteopathy and surgery were sought by 18 applicants. Examinations for certificates of limited practice were taken by 28 mechano-therapists, 6 chiropractors, 1 naprapath, 28 masseurs, 9 chiropodists and 9 cosmetic therapists.

Results of the examinations will be announced at a meeting of the State Medical Board to be held in Columbus, January 7.

Following are the questions asked those who were examined for licenses to practice medicine and surgery:

ANATOMY

1. Describe the ligaments of the uterus.
2. Describe the relations of the thyroid gland.
3. Describe in detail the cutaneous nerve supply of the dorsum and palm of the hand, or illustrate with a diagram.
4. Give a general description of the arrangement of muscles on posterior (dorsal) aspect of the shoulder.
5. Describe the external carotid artery, giving its origin, course, branches and general distribution.

PHYSIOLOGY

1. Discuss the role of the middle and internal ear in hearing.
2. What are the functions of the gall bladder? What is the effect on digestion of the removal of the gall bladder?
3. State whether true or false and tell why: (a) After acute rupture of the spleen the white blood count is markedly lowered. (b) A low white blood count in an infectious disease is a good prognostic sign. (c) Immediately after an acute hemorrhage the red blood count is normal. (d) A tuberculous patient seldom has a true hypertension. (e) The patient with a marked alnuminuria should have a forced protein diet.
4. Describe a simple reflex arc. What is meant by a "conditioned reflex"? Name three types of conditioned reflexes.
5. What is meant by referred pains? Explain the mechanism by which the misreference is brought about, giving three examples.
6. What is the significance of the Argyll-Robertson pupil?
7. What is the composition of normal human blood? Give normals of a complete blood count.
8. What is the sphygnomanometer? Give its use and the significance of the findings.
9. Define: (a) tidal air, (b) minimal air, (c) vital capacity, (d) pneumothorax, (e) apnea.
10. What is a chologogue? Name one and tell how it acts.

DIAGNOSIS

1. Differentiate subacute bacterial endocarditis and acute rheumatic fever.
2. Differentiate acute closure of a large coronary artery and chronic progressive myocardial weakness.
3. Differentiate Addison's disease and Addisonian type of changes of blood.
4. Differentiate oesophageal cardio-spasm and ulcer at cardia.
5. Give blood findings in nephrosclerosis.
6. Differentiate subacute inflammation of sciatic nerve at sacro-iliac joint and dislocated nucleus within a pulposis arising between vertebrae.
7. Describe Vincent's angina attacking tissue in nasopharynx.
8. Differentiate acute appendicitis and stone going through right ureter.
9. What might produce red blood staining from vagina.
10. Give definition and causes of erythema nodosum.

CHEMISTRY

1. Discuss the metabolism of fats.
2. What is the source of indican? Outline test for same.
3. What is the blood sugar level in man? How determined?
4. Define acetonuria. In what conditions does it occur?
5. What is cholesterol? From what is it derived?

MATERIA MEDICA
(Homeopathic)

1. Compare: The pain symptoms of Arnica and Rhus tox. The respiratory symptoms of Ipecac and Tartar emetic.
2. Outline the symptomatic differences of:

   Mercurius vivus or sol
   biniodide
   proto-iodide
   corrosivus
   cyanatus

3. Give the symptoms that would indicate the use of Belladonna in scarlet fever.
4. Give the skin symptoms of Arsenicum and compare with Graphites.
5. Compare the cough of Phosphorus and Hepar sulph.

6-10. Give two or more prominent symptoms in each of the (a) mental, (b) circulatory, (c) skin, (d) digestive and (e) respiratory fields of each of the following remedies: (1) Aconite, (2) Bryonia, (3) Gelsemium, (4) Nux vomica and (5) Pusatilla.

MATERIA MEDICA AND THERAPEUTICS

1. Give the official preparations and dose of digitalis. How does digitalis affect the heart in congestive heart failure? Discuss dosage in such a case.
2. What are the principal actions on the central nervous system of the following: (1) morphine, (2) bromides, (3) chloral hydrate, (4) phenobarbital sodium, (5) atropin?
3. What drugs would you prescribe in: (1) auricular fibrillation, (2) coronary occlusion, (3) anasarca, (4) pulmonary edema, (5) natural gas poisoning?
4. Give official name and action of: (1) diuretin, (2) aspirin, (3) adrenalin, (4) urotropin, (5) cinchophen.
5. What are estrogens? Give action and dose of (1) progesterone, (2) testosterone.
6. What drugs may be used to relieve pain due to: (1) foreign body in cornea, (2) cardiospasm, (3) ureteral stone, (4) migraine, (5) arterial spasm?
7. Discuss action of alcohol in the central nervous system. What drugs would you use in treating delirium tremens?
8. Define: (1) alkaloid, (2) glucosid, (3) tincture, (4) extract, (5) spirits, (6) official waters, (7) solvent, (8) emulsion, (9) fluid extract, (10) excipient.
9. Classify as to action and give dose of each of the following: (1) aminophyllin, (2) phenobarbital, (3) apomorphine chloride, (4) ammonium chloride, (5) erythrol tetranitrate.
10. Write a prescription for six suppositories, each suppository to contain: codein 15 mg., extract belladonna 15 mg., and tannic acid 30 mg. DO NOT SIGN YOUR NAME.

MEDICINE

1. Discuss the dietary requirements of a middle aged diabetic; an office worker, height 5'9", weight 180 lb. with moderate glycosuria.
2. Discuss the advice to give a young man of 25 years, in whom you find on routine physical examination a blood pressure of 200 systolic, 104 diastolic; he complains of no symptoms save occasional headache. Give prognosis.
3. Give signs, symptoms and treatment of early congestive heart failure. Patient ambulatory.
4. In a child of 7 years underweight, poorly developed, persistent cough, occasional evening slight rise of temperature; how would you proceed to establish the diagnosis and outline treatment.
5. Discuss the treatment of a girl of 13 years, short, tending toward obesity, low metabolic rate, with amenorrhea and sluggish mentality.
6. Give treatment of child of 2 years, fed on a proprietary milk powder diet, well-nourished but stops attempting to walk, cries on pressure over hip-joint, gums soft, spongy, bleeding easily.
7. Discuss poliomyelitis. What time of year most frequent? Give symptoms, early and late, and treatment, early and late.
8. Give the symptoms and treatment of acute barbiturate poisoning.

9. Give symptoms and prognosis of cerebral vascular sclerosis.
10. Define Meniere's disease, neuro-circulatory asthenia and Stokes-Adams syndrome.

BACTERIOLOGY, PATHOLOGY AND HYGIENE

1. What organism is the cause of undulant fever; describe it, with usual method of human infection and laboratory diagnosis in a suspected case.
2. Name four pathogenic spirochaete organisms with respective disease caused by each.
3. Name a pathogenic fungus transmissible to man. Give source and laboratory diagnosis.
4. Discuss the explanation for loss of weight in an untreated diabetic. What dangerous condition may occur, and give laboratory test of such impending danger.
5. Discuss the pathology of cavity formation in pulmonary tuberculosis. Give possible results (a) if near a blood vessel and (b) if near the lung periphery.
6. Discuss the pathology of cancer of the stomach, type of cancer and results, (a) at the cardia and (b) at the pylorus.
7. Describe the changes from normal in a chronically enlarged heart (cor bovis), and state reasons for functional failure in such a condition.
8. Discuss methods of transmission of influenza and suggest means of prevention in presence of an epidemic.
9. Discuss the legal requirements for the prevention of gonorrheal ophthalmia in the new-born.
10. What is meant by the term "streptococcic throat"? Give method of recognizing it and name possible sequelae if not successfully treated.

SURGERY

1. Enumerate the most common causes of acute intestinal obstruction. Give the symptoms and indicate the treatment without going into detail.
2. Give the causes, symptoms and treatment of rupture of the urinary bladder.
3. Discuss the diagnosis and treatment of acute osteomyelitis of the tibia in an adolescent.
4. Give the predisposing causes, symptoms, and treatment of epithelioma of the lip.
5. Discuss the treatment of undescended testicles.
6. A mass the size of a walnut is discovered in the breast of a woman about 45 years of age. How would you manage such a case?
7. Describe a luxation of the hip joint and mode of reduction.
8. Describe disarticulation at a metacarpo-phalangeal joint.
9. Describe the steps in the treatment of a scalp wound.
10. State the constitutional effects and give the treatment of burns.

OBSTETRICS AND GYNECOLOGY

1. Discuss management of frank breech in a primipara with normal foetus and pelvis.
2. Excluding cancer, what are the cause of erosion and ulcers of the cervix uteri? How should they be treated?
3. What are the various ways in which intrauterine death of foetus may occur? Discuss causes.
4. Give cause and differential diagnosis of pyelitis during pregnancy.
5. Discuss hemorrhage of the newborn as to causes, locations and treatment.

SPECIALTIES

1. Differentiate the skin lesions of acne rosacea and lupus erythematosis.
2. Give the symptoms, commonest complications and treatment of mastoiditis.
3. What preliminary examination should be completed before administering ether? What are the contra-indications to other anaesthesia?
4. Differentiate shingles (herpes zoster) and poison ivy (rhus toxicodendron).
5. Give the clinical and laboratory differentiation between diphtheria and follicular tonsillitis.

Army Medical Library Wants Reprints

The Army Medical Library, Washington, D. C., will be glad to receive reprints from authors of scientific papers. According to a letter received from the Librarian, Harold W. Jones, Colonel Medical Corps, United States Army, such reprints are placed in a special collection catalogued by author and thus form a ready bibliography of the work of any given writer and a valuable supplementary source of material when the volume of original publication is temporarily unavailable at the bindery or on loan.

Physicians Licensed By Medical Board Through Reciprocity

The State Medical Board has granted licenses to practice medicine and surgery to the following physicians, through reciprocity with other states: Robert G. Angle, Mansfield, Loyola University; William H. Atkinson, Jr., Youngstown, Howard University; James H. Bennett and Ruth B. Bennett, Cincinnati, Northwestern University; Edmund F. Beshara, Glouster, University of Louisville; John T. Brackin, Jr., Youngstown, University of Pennsylvania; Wilbur M. Brown, Mansfield, University of Arkansas; John D. Butler, Akron, Meharry Medical College; Elizabeth I. Christian, Akron, University of Pennsylvania.

Benjamin Coleman, Steubenville, University of Buffalo; John C. Damitz, Akron, University of Iowa; Wiley L. Forman, Columbus, Vanderbilt University; James M. Harkey, Canton, University of Arkansas; Alan S. Horwitz, Dayton, St. Louis University; E. Herndon Hudson, Athens, University of Pennsylvania; Milton M. Kendall, Youngstown, Long Island College of Medicine.

Edward J. Koch, Jr., Toledo, University of Michigan; George L. Maltby, Cincinnati, Harvard University; Edward A. McMurray, Lakewood, St. Louis University; John S. Meier, East Liverpool, Vanderbilt University; Joseph E. Miller, Cleveland, Wisconsin College of Physicians and Surgeons; Clyde R. Milster, Columbus, Washington University; Howard V. Mishler, Cleveland, St. Louis University.

Spencer W. Northup, Toledo, University of Michigan; Johnston F. Osborne, Youngstown, Temple University; Edward M. Phillips and Edward S. Phillips, Barnesville, Jefferson Medical College; Clara Raven, Youngstown, Northwestern University; Eleanor J. Rector and Lewis E. Rector, Akron, Washington University; Rudolph G. Schmidt, Celina, University of Nebraska; Morris W. Selman, Toledo, Wayne University; William A. Sodeman, Toledo, University of Michigan; Harry Stein, Sandusky, Syracuse University; Frank C. Sutton, Cleveland, Northwestern University.

Max S. Thomas, Akron, State University of Iowa; Albert L. Williamson, Niles, University of Kansas; Orin R. Yost, Akron, Medical College of Virginia; Abner Mackey, West Liberty, University of Oklahoma; Lewis H. Armentrout, Portsmouth, Rush Medical College; William L. Mermis, Youngstown, St. Louis University; Charles R. Hughes, Cleveland, University of Pennsylvania; Edmund D. Wells, Newark, University of Louisville; John E. Gallagher, Toledo, Washington University.

Lisbon—Dr. Seward Harris has been re-elected health commissioner of Columbiana County.

In Memoriam

Mifflin Brodhead Brady, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1890; aged 72; member of the Ohio State Medical Association; Fellow of the American Medical Association; died December 8. Associate professor of contagious diseases at the University of Cincinnati College of Medicine, Dr. Brady had practiced in Cincinnati for 50 years. He was a member and former president of the Cincinnati Board of Health and president of the Certified Milk Commission of the Academy of Medicine. Dr. Brady was a Mason and a member of the Ohio Commandery, Military Order of the Loyal Legion, which is composed of sons of Civil War officers. His widow and two daughters survive.

Louis Emmitt Brown, M.D., Akron; Baltimore Medical College, 1903; aged 59; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; diplomate of the American Board of Otolaryngology; member of the American Academy of Ophthalmology and Oto-Laryngology and the American Laryngological, Rhinological and Otological Society; died December 11. A member of the staff of Akron City Hospital, Dr. Brown had been a member of the Summit County Medical Society since December 1, 1914. From 1914 to 1916 he was a lieutenant in the Medical Detachment of the 8th Ohio Regiment. Survivors include Dr. A. W. H. Brown, Baltimore, Md., and Dr. Louis E. Brown, Jr., Akron.

David Laughlin Cowden, M.D., Cambridge; Ohio Medical University, Columbus, 1893; aged 73; member of the Ohio State Medical Association and the American Medical Association; died December 6. Dr. Cowden practiced in Columbus for four years and at Old Washington and Kimbolton before going to Cambridge as Guernsey County Health Commissioner in 1920, serving in that post until his death. He was secretary of the Guernsey County Medical Society, and a life-long member of the United Presbyterian Church, in which he had been an elder for 46 years. Dr. Cowden was an active member of the Cambridge Band for 40 years. He was also a talented composer. Several years ago Dr. Cowden was awarded a trip to Scotland by the Esperanto International Language Society for outstanding work in the study of that language. Surviving are one daughter, three sons, three sisters and two brothers.

William A. Cromley, M.D., Columbus; Starling Medical College, Columbus, 1888; aged 84; former member of the Ohio State Medical Association and the American Medical Association, died December 3. Dr. Cromley retired in 1924, after having practiced in Columbus and in Pickaway and Darke counties. He was a member of the Masonic Order and the Methodist Church. Three daughters and two sons survive.

Frank R. Lord, M.D., Covington, Ky.; Miami Medical College, Cincinnati, 1894; aged 68; former member of the Ohio State Medical Association and the American Medical Association, died November 26. Dr. Lord formerly practiced in Athens, Chillicothe, Oxford and Dayton. A son and a sister survive.

Theodore Frederic Myler, M.D., Xenia; University of Pennsylvania School of Medicine, Philadelphia, 1909; aged 56; member of the Ohio State Medical Association and the American Society of Anesthetists; Fellow of the American Medical Association; died November 27. Dr. Myler practiced medicine in Pittsburgh, his native city, for four years. In 1913 he located in Burton, Geauga County. During the World War Dr. Myler served for two years as a captain in the Medical Corps of the U. S. Army and was stationed in France for 20 months. From 1924 to 1926 he was health commissioner of Fayette County, and for the next two years was resident physician at the O. S. & S. O. Home at Xenia. Dr. Myler joined the McClellan Hospital staff in Xenia in 1929 after having spent a year in California. He was vice-president of the Greene County Medical Society and founder of the Greene County Cabot Club, an organization for the study of diagnostic problems. Dr. Myler was a member of the board of trustees of the Second United Presbyterian Church, a past-president of the Rotary Club and a member of the Masonic Lodge. Surviving are his widow, twin daughters, a sister and three brothers.

James F. Noble, M.D., Custar; Eclectic Medical College, Cincinnati, 1891; aged 70; died December 2. Dr. Noble practiced in Wood County for nearly 51 years. Surviving are a daughter, three sisters, and two brothers, one of whom is Dr. Cyrus W. Noble, Toledo.

Klor Lehman Parent, M.D., Lima; Ohio State University College of Medicine, 1913; aged 51; member of the Ohio State Medical Association and the American Medical Association; died November 20. Dr. Parent practiced in Lima for 27 years. He was a member of the Masonic Lodge. Surviving are his widow, a daughter, a son, a sister and a brother—Dr. W. V. Parent, Lima.

Henry Carl Prill, M.D., Cleveland; Ohio State University College of Homeopathic Medicine, 1915; aged 48; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; died December 4. Dr. Prill had been house physician at the Hollenden Hotel for 22 years. Surviving are his widow, his mother, two sisters and two brothers.

Thomas Ellsworth Schrider, M.D., Bryan; Long Island College of Medicine, Brooklyn, 1889; aged 78; died November 23. Dr. Schrider had practiced in Williams County for 51 years. His widow, a daughter and a son survive.

Harold Dale Strausbaugh, M.D., Columbus; Ohio State University College of Medicine, Columbus, 1910; aged 52; member of the Ohio State Medical Association and the American Medical Association; died November 27. Dr. Strausbaugh practiced in Columbus for over 25 years. During the last World War he served overseas as a first lieutenant in the Medical Corps of the U. S. Army. He was a member of the Masonic Lodge and the Presbyterian Church. Surviving are his widow and two sons.

J. Sumner Teter, M.D., Toledo; Starling Medical College, Cincinnati, 1904; aged 63; member of the Ohio State Medical Association and the American Medical Association; died December 6. Dr. Teter practiced in Harriettsville, Noble County for 10 years, locating in Toledo about 25 years ago. His widow and a sister survive.

Charles Elmore Trimble, M.D., Crestline; Starling Medical College, Columbus, 1890; aged 77; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 27. Dr. Trimble first practiced in Leesville, and in 1891 moved to Crestline, where he was in practice for nearly 50 years. He was a member of the Masonic Order, the Presbyterian Church and the B.P.O.E. Surviving are his widow, a son and a daughter.

Eugene Warren, M.D., Cleveland; Chicago Homeopathic Medical College, 1894; aged 70; died November 10. Before locating in Cleveland 30 years ago, Dr. Warren had practiced in Morgantown and Huntington, W. Va. He was a member of the Methodist Church. His widow survives.

Philadelphia Postgraduate

The Sixth Annual Postgraduate Institute of the Philadelphia County Medical Society will be held at the Bellevue-Stratford Hotel, Philadelphia, March 31 to April 4, 1941. The topic will be "Symposium on Modern Therapy". Details of the program can be obtained from the director, Dr. Rufus S. Reeves, 301 S. 21st St., Philadelphia, Pa.

Revisions Made in Blanks for Filing of Workmen's Compensation Claims

Form C-1, for reporting Workmen's Compensation claims involving disability of more than seven days, form C-71, for reporting Public Employe claims involving disability of more than seven days, and Form C-3, for reporting claims involving disability of seven days or less, have been revised by the State Industrial Commission, so that most of the information required is furnished by the employer, and the claimant's application has been reduced to the essential allegations necessary to constitute an application for payment of compensation or medical services, or both. The attending physician's report is substantially the same as it has been in the past, except that on the reverse side of the report there is a skeleton to be used by the physician to show the location of all injuries.

This change has been made in the hope that it will expedite the filing of applications, particularly applications involving payment of compensation. Section 1465-99 of the Workmen's Compensation Act places the responsibility of keeping a record of all injuries, and of reporting all accidents resulting in personal injury within one week after the occurrence of such accident, upon the employer. While in many instances circumstances arise which prevent strict compliance with this section by the employer, it is hoped that by keeping statistical information with reference to lapse of time between the date of accident and the date reports are filed, those employers who do not report accidents promptly may be contacted and their cooperation in this regard secured.

It is the hope of the Commission that with the cooperation, particularly of employers and physicians, reports of industrial accidents will be filed promptly so that the Commission may be enabled to start payment of compensation to injured workmen at the earliest possible date.

Named to County Committees

At the election on November 5, the following physicians were elected officers of county committees: Dr. W. L. Faul, Sr., chairman, Republican Central Committee, Brown County; Dr. I. P. Seiler, Piketon, secretary, Republican Executive Committee, Pike County; Dr. H. J. Johnston, Tontogany, chairman, Republican Executive Committee, Wood County; Dr. S. C. Clark, Cherry Fork, chairman, Democratic Executive Committee, Adams County; Dr. C. J. Altmaier, Marion, chairman, Democratic Central Committee, Marion County.

Third Annual Forum on Allergy To Be Held at Indianapolis on Week-End of January 11-12

The Third Annual Forum on Allergy will be held at the Claypool Hotel, Indianapolis, Saturday and Sunday, January 11 and 12. In response to an apparent demand the Forum was founded three years ago by a group of outstanding allergists in the Middle West to review the progress of clinical allergy. Previous annual meetings have been held in Toledo and Chicago. The Forum offers to internists, pediatricians, dermatologists, otolaryngologists and all other physicians an opportunity to bring themselves up to date in this field of medicine over a single week-end. All physicians in good standing in their local medical society are most welcome. There will be a registration fee of $5. The program follows:

SATURDAY, JANUARY 11

9:00-11:00 a.m.—Registration at the Forum Headquarters Suite. This offers two hours of informal discussion.

11:00-12:30 p.m.—Study Groups, Series A. (Note: Attendance requires pre-forum registrations. Registrations should be mailed to Dr. Tell Nelson, 636 Church Street, Evanston, Illinois.)

1. "Atopic Eczema", Dr. Karl D. Figley, Toledo, Ohio.
2. "Urticaria", Dr. Ethan Allen Brown, Boston.
3. "Symptomatic Treatment in the Case of Bronchial Asthma in Which Cause Cannot Be Determined", Dr. Milton B. Cohen, Cleveland.
4. "Mold Allergy", Dr. S. M. Feinberg, Chicago.
5. "Allergic Coryza", Dr. French Hansel, St. Louis.

12:30 p.m.—Subscription Luncheon.

2:00-3:30 p.m.—Study Groups, Series B.

1. "Atopic Eczema", Dr. Rudolph Hecht, Chicago.
2. "Urticaria", Dr. Jonathan Forman, Columbus.
3. "Symptomatic Treatment in the Case of Bronchial Asthma in Which the Cause Cannot Be Determined", Dr. John Sheldon, Ann Arbor.
4. "Mold Allergy", Dr. M. B. Morrow, Austin, Texas; Dr. Homer Prince, Houston, Texas.
5. "The Heart in Asthma", Dr. Oscar Swineford, University, Va.

4:00 p.m.—Special Lecture: Dr. George Waldbott, Detroit, presiding; "Allergic Manifestations in the Eye", Dr. Albert D. Ruedemann, Cleveland Clinic.

7:00 p.m.—Annual Smoker with Informal Discussion and Demonstrations.

a—"Ocular Allergy", Dr. A. D. Rudemann and Dr. J. W. Thomas, Cleveland.

b—"Mold Allergy", Association for Mycological Investigation, Dr. Marie Morrow, Austin, Texas, and Dr. Homer Prince, Houston, Texas.

c—"Spontaneous Allergy (Atopy) in Lower Animals" (Motion Picture), Dr. Fred Wittich, Minneapolis.

SUNDAY, JANUARY 12
SYMPOSIA ON CLINICAL SUBJECTS

Symposium on Bronchial Asthma

Moderator: Dr. B. Z. Rappaport, Chicago

9:00-9:10 a.m.—"The Importance of the Diaphragm in Bronchial Asthma", Dr. John H. Mitchell, Columbus.

9:10-9:20 a.m.—"The Use of Breathing Exercises in the Treatment of Bronchial Asthma", Dr. I. M. Hinnant, Cleveland.

9:20-9:30 a.m.—"The Importance of Rest in the Treatment of Bronchial Asthma", Dr. Barney Credille, Flint, Michigan.

9:30-9:40 a.m.—"The Importance of Nutrition in Bronchial Asthma", Dr. Howard Lee, Oshkosh, Wisconsin.

9:40-10:00 a.m.—Question and Answer Period.

Symposium on Insects as Allergens

Moderator: Dr. Harry Huber, Chicago

10:00-10:10 a.m.—"Beetles", Dr. Harvey Johnston, Ann Arbor.

10:10-10:20 a.m.—"Fish Food", Dr. Karl D. Way, Akron.

10:20-10:30 a.m.—"Moths", Dr. Ralph Mills, Decatur, Illinois.

10:30-10:40 a.m.—"Grain Mites", Dr. Fred Wittich, Minneapolis.

10:40-11:00 a.m.—Question and Answer Period.

Symposium on Allergic Headache

Moderator: Dr. Theodore Squire, Milwaukee

11:00-11:10 a.m.—"Differential Diagnosis", Dr. S. R. Zoss, Youngstown.

11:10-11:20 a.m.—"Value of Diagnostic Procedures", Dr. Myron A. Weitz, Cleveland.

11:20-11:30 a.m.—"Non-Specific Therapy", Dr. E. G. Tatge, Evanston.

11:30-11:40 a.m.—"Specific Therapy", Dr. Orville Withers, Kansas City, Mo.

11:40-12:00 noon — Question and Answer Period.

ANNUAL FORUM DINNER

12:30 p.m.—Dr. C. B. Bohner, Indianapolis, Presiding.

The Presentation of Gold Medal for Distinguished and Outstanding Contributions in the Field of Allergy.

ANNUAL FORUM LECTURE

2:00 p.m.—Dr. Bela Schick, New York, "Allergy, Hypersensitiveness and Immunity".

SPECIAL LECTURE

"Water and Electrolyte Metabolism in Allergy", Dr. M. M. Cook, St. Louis.

Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

The Adams County Medical Society met at West Union, Wednesday afternoon, December 18. Following a business session, Dr. Sam Clark, Cherry Fork, gave his report as legislative committeeman. Dr. R. B. Ellison, Peebles, spoke on "Poor Relief". His paper was discussed by Dr. R. L. Lawwill, Seaman. Albert E. Beardsley, West Union, rural rehabilitation supervisor, gave an address on the program of the Farm Security Administration.—O. T. Sproull, M.D., secretary.

BUTLER

Dr. Louis A. Lurie of the Child Guidance Home, Cincinnati, spoke on the subject: "Is the Behavior of Children a Medical Responsibility?", at a meeting of the Butler County Medical Society, Thursday evening, November 28, at Mercy Hospital, Hamilton. There were 22 members and two guests present.—Vera Coombs Iber, M.D., secretary.

CLERMONT

Officers of the Clermont County Medical Society for 1941 are: Dr. John T. Crone, Jr., Milford, president; Dr. Warren E. Thomas, Milford, vice-president; Dr. J. M. Coleman, Loveland, secretary-treasurer; Dr. Thomas Longworth, Felicity, legislative committeeman; Dr. A. B. Rapp, Owensville, chairman, public relations and medical economics committee; Dr. Crone, delegate; Dr. Coleman, alternate.—J. M. Coleman, M.D., secretary.

CLINTON

Dr. Reyburn McClellan, Xenia, spoke on "Cancer", at a meeting of the Clinton County Medical Society, Tuesday noon, December 3, at the General Denver Hotel, Wilmington.—News clipping.

HAMILTON

The Academy of Medicine of Cincinnati presented the following programs during December:

December 3—"Chronic Pulmonary Heart Disease (Cor Pulmonale)", Dr. Stanley D. Simon; "Phases of the Heart Action", Dr. Dale P. Osborn.

December 10—Hospital Night at Good Samaritan Hospital. Clinical pathological conference, in which Drs. Joseph N. Ganim, William M. German, Edward J. McGrath, Richard S. Tyler, and members of the resident staff participated.

December 17—"Functional Medicine from the Standpoint of the Dermatologist", Dr. Samuel W. Becker, associate professor of dermatology and syphilology, University of Chicago. This meeting was held under the auspices of the Cincinnati Dermatological Society.—Bulletin.

Officers of the Woman's Auxiliary to the Academy are: Mrs. William L. Freyhof, president; Mrs. J. Stewart Mathews, vice-president; Mrs. Theodore H. Vinke, treasurer; Mrs. William Carmon, corresponding secretary; Mr. David W. Heusinkveld, recording secretary, and Mesdames Horace F. Tangeman, Henry B. Freiberg and Ralph G. Carothers, board members.—News clipping.

HIGHLAND

Dr. J. C. Larkin spoke on "Socialized Medicine", at a meeting of the Woman's Auxiliary to the Highland County Medical Society, Wednesday, December 4, at Hillsboro.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

GREENE

A motion picture, "When Bobby Goes to School", was shown at a meeting of the Greene County Medical Society, Thursday, December 5, at Xenia. The society indorsed the picture and recommended that it be shown to lay groups in the county.

The society adopted a resolution expressing its regret at the death of Dr. T. F. Myler.

The following officers were elected for the ensuing year: Dr. A. D. Ritenour, Jamestown, president; Dr. W. T. Ungard, Xenia, vice-president; Dr. Donald F. Kyle, Cedarville, secretary-treasurer; Dr. P. D. Espey, Xenia, legislative committeeman; Dr. H. C. Messenger, Xenia, delegate; Dr. C. G. McPherson, Xenia, alternate. —D. F. Kyle, M.D., secretary.

DARKE

A dinner meeting of the Darke County Medical Society was held at the Christian Church, Ansonia, Tuesday, December 17. An interesting discussion of "Fever Therapy", using slides and motion pictures, was presented by Dr. H. Worley Kendell, associate director, and Dr. Donald L. Rose, research associate of the Kettering Institute for Medical Research, Dayton.—W. D. Bishop, M.D., secretary.

MIAMI

Officers of the Miami County Medical Society for 1941 are: Dr. R. D. Yates, Piqua, president; Dr. Paul E. Foy, Troy, vice-president; Dr. G. A. Woodhouse, Pleasant Hill, secretary-treasurer; Dr. I. C. Kiser, Piqua, legislative committeeman; Dr. Woodhouse, delegate; Dr. E. G. Puterbaugh, Tipp City, alternate.—G. A. Woodhouse, M.D., secretary.

At a meeting of the society Friday, December 6, at the Piqua Memorial Hospital, the following scientific program was presented: A sound movie, entitled, "Pneumonia", a pediatric clinic by Dr. I. A. Abt, Chicago; case report on "Placenta Accreta", Dr. E. R. Torrence, Troy, and a demonstration of the Sonotone Audiometer by a representative of the Sonotone Corporation.—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

Major Frank J. Vokoun, Med. Res., U. S. Army, Medical Instructor for the Ohio Military Area, spoke on "Medical Preparedness", at a special meeting of the Montgomery, Clark and Greene county medical societies, Friday, December 20, at Dayton. — Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

ALLEN

Dr. Wm. M. Skipp, Youngstown, President of the Ohio State Medical Association, discussed the Association's activities at a meeting of the Academy of Medicine of Lima and Allen County, Tuesday, November 19, at Lima.

Officers of the Woman's Auxiliary to the Academy are: Mrs. Walter A. Noble, president; Mrs. Karl F. Ritter, president-elect; Mrs. J. M. McBride, vice-president; Mrs. Roger L. Tecklenberg, secretary; Mrs. Charles L. Steere, treasurer.—News clipping.

AUGLAIZE

Dr. Guy E. Noble, Councilor for the Third District of the Ohio State Medical Association, spoke on "Present Political Status of Medical Practice", at a meeting of the Auglaize County Medical Society, Thursday evening, December 12, at St. Marys. An illustrated lecture on "Tibet", was given by R. A. Peterson, Lima, representative of Eli Lilly and Company.

Officers of the society for 1941 are: Dr. E. F. Heffner, Wapakoneta, president; Dr. H. J. Gudenkauf, Minster, vice-president; Dr. Chas. C. Berlin, secretary-treasurer; Dr. Guy E. Noble, St. Marys, chairman, legislative committee; Dr. T. A. Campbell, Wapakoneta, chairman, public relations committee; Dr. Geo. B. Faulder, Wapakoneta, delegate; Dr. Berlin, alternate.—Chas. C. Berlin, M.D., secretary.

CRAWFORD

At a meeting of the Crawford County Medical Society, Monday night, December 2, at Bucyrus, the following officers were elected for the ensuing year: Dr. John S. Kiess, Bucyrus, president; Dr. F. W. Kehrer, Bucyrus, vice-president; Dr. J. W. Arnold, Bucyrus, secretary-treasurer; Dr. W. G. Carlisle, Bucyrus, and Dr. Kiess, legislative committeemen; Dr. G. T. Wasson, Bucyrus, public relations committeeman; Dr. C. A. Marquart, Crestline, medical economics committeeman; Dr. R. J. Caton, Bucyrus, delegate; Dr. E. C. Brandt, Crestline, alternate.—J. W. Arnold, M.D., secretary.

Mrs. J. L. Stevens, Mansfield, secretary-treasurer of the Woman's Auxiliary to the Ohio State Medical Association, was guest speaker at an organization meeting of the Woman's Auxiliary to the Crawford County Medical Society, at Bucyrus, December 3. Mrs. E. C. Brandt, Crestline, presided and various committees were appointed for the purpose of forming a permanent organization.—News clipping.

LOGAN

New officers of the Logan County Medical Society are: Dr. Chas. L. Barrett, Bellefontaine, president; Dr. F. B. Kaylor, Bellefontaine, secretary-treasurer; Dr. J. P. Harbert, Bellefontaine, legislative committeeman; Dr. M. L. Pratt and Dr. Robt. B. Pratt, Bellefontaine, public relations and medical economics committeemen; Dr. F. Blair Webster, Bellefontaine, delegate; Dr. John K. Humphries, Belle Center, alternate.—F. B. Kaylor, M.D., secretary.

HANCOCK

Officers of the Hancock County Medical Society for 1941 are: Dr. Ralph E. Rasor, Bloomdale, president; Dr. I. E. Treece, Arlington, vice-president; Dr. M. K. Marshall, Findlay, secretary; Dr. Earl J. Thomas, Findlay, treasurer; Dr. E. E. Rakestraw, Findlay, legislative committeeman; Dr. H. O. Crosby, Findlay, public relations committeeman; Dr. J. H. Marshall, Findlay, medical economics committeeman; Dr. Frank M. Wiseley, Findlay, delegate; Dr. John H. Marshall, Findlay, alternate.—L. H. Goodman, M.D., retiring secretary.

MARION

Dr. A. P. R. James, Toledo dermatologist, was the guest speaker at a meeting of the Marion Academy of Medicine, Tuesday night, November 26, at the Marion City Hospital.—News clipping.

MERCER

Dr. Marion Scheetz, Louisville, Ind., was guest speaker at a meeting of the Mercer County Medical Society, Tuesday evening, December 10, at the home of Dr. John T. Gibbons, Celina. The society endorsed the formation of a Woman's Auxiliary. The following officers were elected for 1941: Dr. M. L. Downing, Rockford, president; Dr. G. I. Scheetz, Rockford, vice-president; Dr. John T. Gibbons, Celina, secretary-treasurer; Dr. R. B. Benning, Ft. Recovery, delegate; Dr.

R. J. Beare, Celina, alternate.—John T. Gibbons, M.D., secretary.

SENECA

At a meeting of the Seneca County Medical Society, Thursday evening, November 14, at the Hotel Shawhan, Tiffin, the following new officers were elected: Dr. Wilbur F. Stewart, Fostoria, president; Dr. R. F. Machamer, Tiffin, vice-president; Dr. N. E. Williard, Tiffin, secretary-treasurer; Dr. R. E. Hershberger, Tiffin, legislative committeeman; Dr. R. R. Hendershott, Tiffin, delegate; Dr. E. H. Porter, Tiffin, alternate.—N. E. Williard, M.D., secretary.

E. Tappan Rodgers presented travel pictures of Mexico and Hawaii at a meeting of the society, Thursday night, December 12, at the Hotel Shawhan, Tiffin.—M. H. Aiken, M.D., retiring secretary.

Officers of the Woman's Auxiliary for 1941 are: Mrs. Wade K. Chamberlin, Tiffin, president; Mrs. Wm. Gordon Hartnett, Fostoria, vice-president; Mrs. H. E. Hengen, New Riegel, secretary; Mrs. R. E. Hershberger, Tiffin, treasurer.—News clipping.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

DEFIANCE

Officers of the Defiance County Medical Society for 1941 are: Dr. Seth E. DeMuth, Hicksville, president; Dr. J. S. Hull, Hicksville, vice-president; Dr. E. P. Mitchell, Defiance, secretary-treasurer; Dr. George W. DeMuth, Sherwood, legislative committeeman; Dr. E. C. Wurst, Defiance, public relations committeeman; Dr. G. E. Winn, Defiance, medical economics committeeman; Dr. D. J. Slosser, Defiance, delegate; Dr. Paul B. Newcomb, Defiance, alternate.—E. P. Mitchell, M.D., secretary.

FULTON

At a meeting of the Fulton County Medical Society, December 5, the following officers were elected for the ensuing year: Dr. C. F. Hartmann, Wauseon, president; Dr. A. M. Wilkins, Delta, vice-president; Dr. George McGuffin, Pettisville, secretary-treasurer; Dr. E. A. Murbach, Archbold, legislative committeeman; Dr. C. F. Murbach, Archbold, public relations committeeman; Dr. C. L. Hutchins, Delta, medical economics committeeman; Dr. R. W. Reynolds, Fayette, delegate; Dr. C. Harold Heffron, Metamora, alternate.—George McGuffin, M.D., secretary.

HENRY

Officers of the Henry County Medical Society for 1941 are: Dr. G. M. Wright, Liberty Center, president; Dr. Thos. Quinn, Napoleon, vice-president; Dr. L. E. Overhulse, Holgate, secretary-treasurer; Dr. J. R. Bolles, chairman, legislative and public relations committees; Dr. T. P. Delventhal, Napoleon, chairman, medical economics committee; Dr. J. J. Harrison, Napoleon, delegate; Dr. Quinn, alternate.—David A. Wiener, M.D., retiring secretary.

LUCAS

The Toledo Academy of Medicine presented the following program during December:

December 6—General Meeting. "Infantile Paralysis: Its Pathogenesis", Dr. J. A. Toomey, Cleveland.

December 13—Final lecture, Sixteenth Annual Postgraduate Course. "Interpretation of Some of the Patient's Symptoms", Dr. A. C. Ivy, professor of physiology and pharmacology, Northwestern University Medical School, Chicago.

December 20—Medical Section. "Vagaries in Diagnosis and Treatment of Pernicious Anemia", Dr. Foster Myers; "Gastroscopic Findings", Dr. H. F. Howe, discussion by Dr. Philip Katz.—Bulletin.

The Annual Postgraduate Course of the Academy, December 11-13, was very well attended, 148 physicians having registered for the course, with an average attendance of over 100 at each of the eight sessions.

The Annual Dinner and report of elections has been set for Friday, January 3, at 6:00 P.M., at the Commodore Perry Hotel. Dr. Morris Fishbein, Editor of *The Journal of the American Medical Association,* is to speak on "American Medicine Prepares".—George W. Cooley, executive secretary.

PUTNAM

Dr. Edward W. Laboe, superintendent of the Lima District Hospital, discussed the various types of tuberculosis at a meeting of the Putnam County Medical Society, Tuesday, November 5, at the Hotel Putnam, Ottawa. Dr. Laboe's lecture was supplemented by an unusually complete collection of films showing some rare findings in pathology of the chest.

The scientific program for the meeting of the society at Hotel Putnam, Ottawa, Tuesday, December 3, was furnished by Dr. J. R. Tillotson, Lima, who gave a most interesting review of modern procedures in traumatic surgery. He emphasized particularly the importance of immediate diagnosis and early treatment of shock as seen in roadside injuries by automobile. Antisepsis, proper splinting and careful handling of tissues were illustrated by carefully prepared motion pictures.—H. N. Trumbull, M.D., correspondent for *The Journal.*

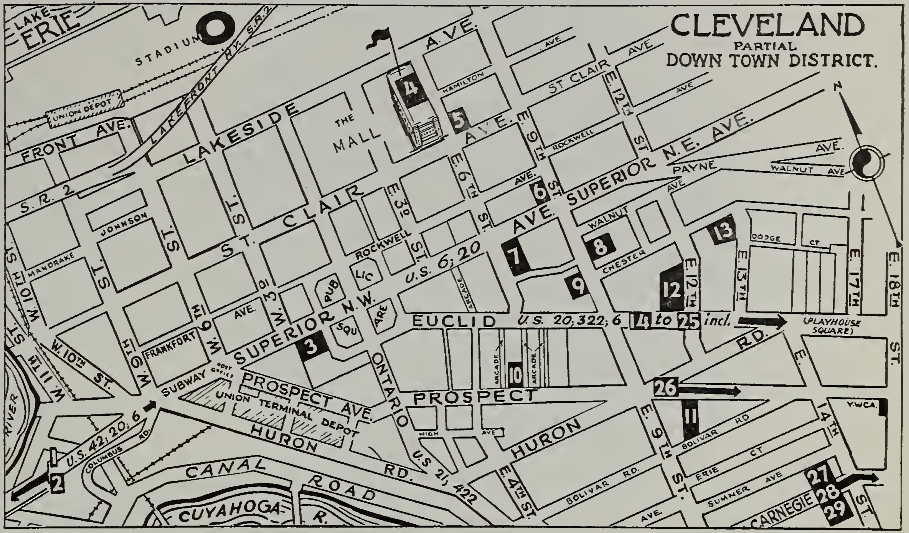
The society has elected the following officers for 1941: Dr. Elisha Blackburn, Kalida, president; Dr. J. R. Echelbarger, Ottawa, vice-president; Dr. Milo B. Rice, Pandora, secretary-treasurer; Dr. W. B. Recker, Leipsic, legislative committeeman; Dr. Echelbarger and Dr. Recker,

A.M.A. SESSION • CLEVELAND

JUNE 2-6, 1941

HOTEL RESERVATIONS

If you expect to attend the Cleveland Session of the American Medical Association, now is the most desirable time to make your hotel reservation. The list below offers a wide choice of accommodations. The coupon enables you to send in your reservation in a few minutes' time. Be sure to indicate first, second and third choice, and other details. Mail to Dr. Edward F. Kieger, Chairman Hotel Committee, Cleveland Convention and Visitors' Bureau, Inc., 1604 Terminal Tower, Cleveland, Ohio.



SCHEDULE OF RATES (ALL RATES ARE FOR ROOMS WITH BATH)

Number on Map	HOTELS	SINGLES	DOUBLES	TWIN BEDS	SUITES
29	**ALCAZAR**, Surrey at Derbyshire Rd.	$3.00	$5.00	$5.00	$10.00-$15.00
13	**ALLERTON**, Chester at E. 13th St.	2.50- 3.00	4.25- 4.50		10.00
5	**AUDITORIUM HOTEL**, St. Clair at E. 6th St.	2.00- 4.00	4.00- 5.50	5.00- 7.00	
17	**BELMONT**, 3844 Euclid Ave.	1.75- 3.50	3.00- 5.00	4.00- 6.00	8.00- 10.00
27	**BOLTON SQUARE**, Carnegie at E. 89th St.	2.50- 3.00	3.50- 4.00	4.00- 5.00	8.00- 12.00
11	**CARTER**, Prospect at E. 9th St.	2.75- 5.00	4.00- 7.00	5.00- 9.00	12.00
3	**CLEVELAND**, Public Square	3.00- 6.00	4.50- 6.50	6.00- 10.00	21.00- 30.00
4	**CLEVELAND PUBLIC AUDITORIUM**, Lakeside & E. 6th St.				
10	**COLONIAL**, Prospect at E. 6th St.	2.50- 4.00	4.00- 6.00	5.00- 7.00	
20	**DEVON HALL**, 1588 Ansel Rd.	2.00- 3.00	3.00	3.00	
25	**DOANBROOKE**, 1924 E. 105th St.	2.50	4.00	4.50	
21	**FENWAY HALL**, Euclid at E. 107th St.	3.00- 5.00	4.50- 7.50	5.00- 10.00	6.50- 12.00
15	**FERN HALL**, 3250 Euclid Ave.	1.50- 2.50	2.50- 3.00	4.00- 5.00	
8	**GILLSY**, 1811 E. 9th St.	2.00- 4.00	3.00- 5.00	4.00- 8.00	
7	**HOLLENDEN**, Superior at E. 6th St.	3.00- 8.00	4.50- 10.00	5.00- 12.00	12.00- 16.00
1	**LAKE SHORE**, 12506 Edgewater Dr.	3.50	6.00	6.00- 8.00	8.00- 12.00
9	**MILNER**, 1862 E. 9th St.	1.50- 2.50	2.00	2.00	
14	**NEW AMSTERDAM**, Euclid at E. 22nd St.	2.00- 3.50	3.50- 4.50	4.50- 6.00	
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12	**STATLER**, Euclid at E. 12th St.	3.00- 6.00	4.50- 8.00	5.00- 8.00	10.00- 23.00 (2-4 persons)
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28	**TUDOR-ARMS**, 10660 Carnegie Ave.	3.00- 6.00		6.00- 10.00	
24	**WADE PARK MANOR**, Park Lane at E. 107th St.	3.00- 4.00	7.00- 10.00	5.00- 6.00	10.00- 16.00
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WOOD

A meeting of the Wood County Medical Society was held at Woman's Club, Bowling Green, Thursday evening, December 12. During the business session, a tentative plan was adopted for the examination of draftees. The scientific program consisted of an address on "Medical Diagnosis and Treatment of Poliomyelitis", by Dr. Paul F. Orr, Perrysburg, and one on "Orthopedic Treatment of Poliomyelitis", by Dr. Burt G. Chollett, Toledo. Dr. Orr gave an interesting account of the diagnosis and treatment of the acute attack and discussed the conflicting views on the etiology prevailing at this time. He stressed the need for continuance of quarantine measures. Dr. Chollett presented an informative resumé of the orthopedic correction of deformities, and the work of the Hospital for Crippled Children. Colored lantern slides added much to the value of the paper. A rising vote of thanks was tendered the essayists at the close of the program.—D. R. Barr, M.D., correspondent for *The Journal.*

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

ASHTABULA

Dr. C. H. Dailey, Erie, Pa., of the 23rd Narcotic Division of Pennsylvania, spoke on "The Distribution of Narcotics", at a meeting of the Ashtabula County Medical Society, attended by 25 members, Tuesday, December 10, at Brown Memorial Hospital, Conneaut.

The following new officers were elected: Dr. C. C. Campbell, Ashtabula, president; Dr. N. C. Kiefer, Geneva, vice-president; Dr. Noble F. Crandall, Ashtabula, secretary-treasurer; Dr. R. B. Wynkoop, Ashtabula, legislative committeeman and delegate; Dr. Perry R. Longaker, Conneaut, alternate.—C. T. Risley, M.D., retiring secretary.

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during December:

December 5—Combined Meeting of the Military Section and the 368th Medical Regiment. "Anesthesia in Military Surgery", Dr. B. B. Sankey; "Medico Military Mobilization", Major Frank J. Vokoun, Medical Reserve, U.S.A., military instructor, Ohio Area, Columbus (formerly of Cleveland).

December 6—Clinical and Pathological Section. Special clinical conference and roundtable discussion at Cleveland Clinic.

December 11—Medical Practice Section. "An Evaluation of Methods of Treatment of Bleeding Peptic Ulcers", Dr. Edward Woldman; "Gastritis Problems", Dr. John Renshaw; "Practical Aspects of Intestinal Intubation", Dr. Paul M. Glenn.

December 13—Joint Meeting, Experimental Medical Section and Cleveland Section of the Society for Experimental Biology and Medicine. "Factors Relating to the Growth of the Vaccinia Virus", R. L. Thompson, Sc.D.; "Neutralization of Vaccine Virus by Immune Serum: The Effect of Prolonged Contact between Serum and Virus", Dr. R. H. Green and Dr. R. F. Parker; "Neutralization of Vaccine Virus by Immune Serum: Pitration by Intracerebral Inoculation of Mice", Dr. L. H. Bronson and Dr. R. F. Parker; "The Treatment of Infected Wounds with Ultra-Violet Radiation from Cold Mercury Arc; Experimental and Clinical Studies", Dr. R. Herz.

December 18—Obstetrical and Gynecological Section. Symposium on Uterine Bleeding. "Obstetrical Aspects", Dr. Ralph S. Dial, discussion by Dr. M. Garber; "Gynecological Aspects", Dr. Gerald B. Hurd, discussion by Dr. R. L. Faulkner; "Endocrinological Aspects", Dr. Bessie G. Wiesstien, discussion by Dr. E. E. Beard.

December 17—Pediatric Section. "Hereditary Factors in Blood Dyscrasias", Dr. Thomas B. Cooley, professor of pediatrics, Wayne University Medical School, Detroit, Mich.

December 18—Industrial Medicine Section. "Clinical Aspects of Intervertebral Disk Herniations", Dr. J. I. Kendrick; "Gout", Dr. Walter J. Zeiter; "End Results in the Treatment of Intracapsular Fractures of the Neck of the Femur, Using Smith-Petersen Nail", Dr. D. I. Minning; "Treatment of Fractures of the Patella", Dr. J. A. Dickson.

December 20—Downtown Academy Meeting. "Diet in Relation to Wound Healing", Dr. Samuel Clark Harvey, professor of surgery, Yale University School of Medicine, New Haven, Conn.—Bulletin.

GEAUGA

Officers of the Geauga County Medical Society for 1941 are: Dr. Alton W. Behm, Chardon, president; Dr. G. R. French, Burton, vice-president; Dr. Isa Teed Cramton, Burton, secretary-treasurer; Dr. W. C. Cory, Chardon, legislative committeeman; Dr. Lucy S. Hertzog, Chardon, public relations committeeman.—Isa Teed Cramton, M.D., secretary.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

COLUMBIANA

Dr. Paul J. Fuzy, Youngstown, spoke on "Proctological Problems", at a meeting of the

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Columbiana County Medical Society, Tuesday evening, November 12, at the American Legion Hall, Lisbon.—News clipping.

Guest speaker at the society's meeting, Tuesday night, December 10, was Dr. W. D. Collier, Youngstown, who discussed: "Endocrine Pathology and Physiology—Emphasis on Practical Application".—News clipping.

STARK

"Pre-operative and Post-operative Care of Patients—Medical and Surgical", was the subject discussed by Dr. Max M. Zinninger, professor of surgery, University of Cincinnati College of Medicine, at a meeting of the Stark County Medical Society, Thursday evening, December 19, at the Elks' Club, Canton.—Clair B. King, M.D., secretary.

TRUMBULL

Thirty-three members of the Woman's Auxiliary to the Trumbull County Medical Society attended a bridge luncheon at the Trumbull Country Club, Niles, Tuesday, December 3.—News clipping.

MAHONING

Lt. Colonel H. E. Boucher, Columbus, chief medical officer, Selective Service for Ohio, spoke on "Problems of the Examining Physician", at a meeting of the Mahoning County Medical Society, Tuesday, December 17, at the Youngstown Club, Youngstown.—Bulletin.

PORTAGE

Members of the Portage County Medical Society were guests of Dr. Elizabeth A. Leggett and Dr. Emily J. Widdecombe, at the home of Dr. Leggett in Kent, Thursday evening, December 5. The following officers were elected for the ensuing year: Dr. John M. Painter, Kent, president; Dr. Myron W. Thomas, Garrettsville, vice-president; Dr. Widdecombe, secretary-treasurer; Dr. S. U. Sivon, Ravenna, legislative committeeman; Dr. Painter, delegate; Dr. Thomas, alternate.

Dr. Leggett presented a paper on "Tuberculin Testing", and Dr. E. M. Kauffman, Kent, spoke on "Medical Treatment of Gall Bladder Disease". The proposed Enabling Act for the establishment of medical service plans was interestingly discussed by Dr. Wm. M. Skipp, Youngstown, President of the Ohio State Medical Association.—Emily J. Widdecombe, M.D., secretary.

Seventh District

(COUNCILOR: CARL GOEHRING, M.D., STEUBENVILLE)

CARROLL

Officers of the Carroll County Medical Society for 1941 are: Dr. Carl A. Lincke, Carrollton, president; Dr. P. S. Whiteleather, Minerva, vice-president; Dr. Walter G. Lyle, Minerva, secretary-treasurer; Dr. John H. Murray, Carrollton, and Dr. Samuel L. Weir, Minerva, legislative committeemen; Dr. Glenn C. Dowell, Carrollton, public relations committeeman; Dr. Jos. D. Stires, Malvern, medical economics committeeman; Dr. Lincke, delegate; Dr. Stires, alternate. —Carl A. Lincke, M.D., president.

BELMONT

At a dinner meeting of the Belmont County Medical Society, Monday, December 2, at Martins Ferry, the following officers were elected for the ensuing year: Dr. Wm. Miles Garrison, St. Clairsville, president; Dr. J. O. Howells, Bridgeport, president-elect; Dr. C. W. Kirkland, Bellaire, secretary-treasurer; Dr. R. H. Wilson, Martins Ferry, chairman, legislative committee; Dr. J. J. Arbaugh, Martins Ferry, chairman, public relations committee; Dr. C. B. Messerly, Martins Ferry, chairman, medical economics committee; Dr. Garrison, delegate; Dr. Howells, alternate.

The Woman's Auxiliary met on the same evening at the home of Mrs. R. H. Wilson, president of the organization.—C. W. Kirkland, M.D., secretary.

TUSCARAWAS

At a meeting of the Tuscarawas County Medical Society, Thursday, November 14, at the Reeves Hotel, New Philadelphia, Dr. H. M. Clodfelter, Columbus, spoke on "Pneumonia", and Dr. S. A. Hatfield, Columbus, discussed "The Deficiency Anemias".

On the same evening, wives of the members met at the home of Mrs. W. E. Hudson and organized a Woman's Auxiliary. The following officers were elected: Mrs. H. A. Coleman, New Philadelphia, president; Mrs. Burrell Russell, New Philadelphia, vice-president, and Mrs. G. W. Stelzner, Newcomerstown, secretary-treasurer.—News clipping.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

ATHENS

Dr. E. LeFever, Glouster, presented a very interesting paper entitled, "A Surgical Operation and Its Effect on the Destiny of a Nation", at a meeting of the Athens County Medical Society, Tuesday, December 10, at the American Legion Hall, Nelsonville. Dr. LeFever discussed a little known operation performed on President Cleveland during one of the critical periods in the financial history of our nation.

Dr. B. B. Backley of the County Department of Health discussed a prospective venereal disease clinic for indigent patients, and the society appointed a committee to work with him in the formation of such a clinic.

The following officers were elected for 1941: Dr. L. D. Robinson, Guysville, president; Dr.

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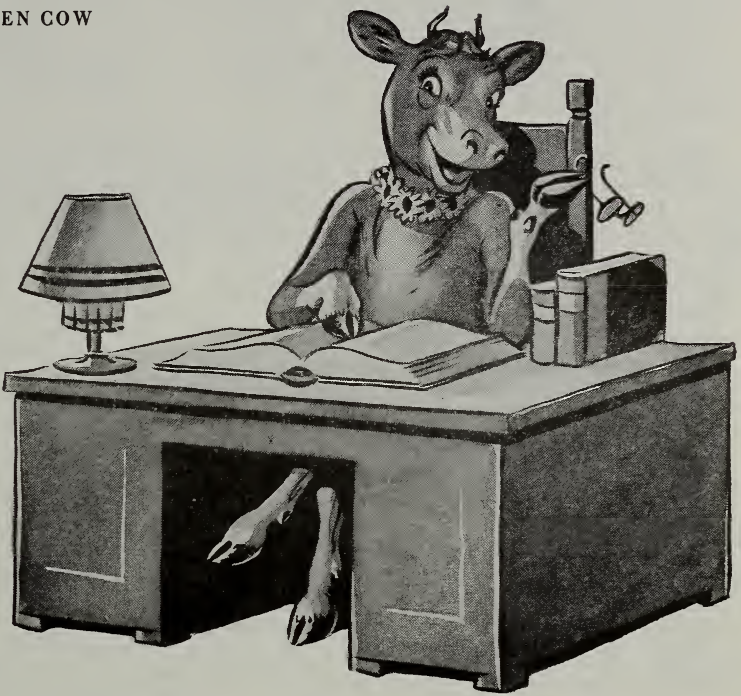

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FAIRFIELD

Officers of the Fairfield County Medical Society for 1941 are: Dr. F. W. James, Lancaster, president; Dr. W. E. Wiyiarch, Lancaster, vice-president; Dr. Carl W. Brown, Lancaster, secretary-treasurer; Dr. C. G. Axline, Lancaster, legislative committeeman; Dr. L. E. Stenger, Lancaster, medical economics committeeman; Dr. O. W. Jepsen, Canal Winchester, delegate; Dr. Chas. B. Crow, Lancaster, alternate.—Carl W. Brown, M.D., secretary.

GUERNSEY

The Guernsey County Medical Society has elected the following new officers: Dr. M. C. McCuskey, Senecaville, president; Dr. J. W. Camp, Cambridge, vice-president; Dr. M. J. Thomas, Cambridge, secretary-treasurer; Dr. M. S. Lawrence, Quaker City, legislative committeeman; Dr. W. L. Denny, Cambridge, chairman, public relations committee; Dr. F. W. Lane, Cambridge, delegate; Dr. Denny, alternate.—M. J. Thomas, M.D., secretary.

LICKING

Dr. John H. Mitchell, Columbus, was guest speaker at a meeting of the Licking County Medical Society, Wednesday night, November 27, at Newark.—News clipping.

MUSKINGUM

Mrs. R. D. Bateman, Zanesville, was named the first president of the Woman's Auxiliary to the Muskingum County Academy of Medicine, which was organized at a meeting in Zanesville, Friday afternoon, November 29. Other officers are: Mrs. Maurice A. Loebell, Zanesville, president-elect; and Mrs. H. B. Kaufman, Philo, secretary-treasurer.—News clipping.

WASHINGTON

At a meeting of the Washington County Medical Society, Wednesday, December 11, at the Wakefield Hotel, Marietta, the following officers were elected for 1941: Dr. George E. Huston, Lowell, president; Dr. Richard H. Sloan, Marietta, vice-president; Dr. Deane H. Northrup, Marietta, secretary-treasurer; Dr. J. F. Weber, Marietta, legislative committeeman; Dr. R. M. Meredith, Marietta, delegate; Dr. F. E. Eddy, Marietta, alternate.

A Woman's Auxiliary was organized at the same meeting. The officers are: Mrs. R. M. Meredith, president; Mrs. Theodore Mattocks, vice-president; Mrs. Richard Sloan, secretary-treasurer; Mrs. J. F. Weber, delegate; Mrs. F. E. Eddy, alternate.—Deane H. Northrup, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

LAWRENCE

Four veteran members were honored at a meeting of the Lawrence County Medical Society, Thursday evening, November 14, at the Hotel Marting, Ironton. They were: Dr. D. J. Webster, Dr. O. U. O'Neill, Dr. E. E. Ellsworth and Dr. F. D. Campbell.—News clipping.

PIKE

Officers of the Pike County Medical Society for 1941 are: Dr. W. L. McCaleb, Beaver, president; Dr. Mack E. Moore, Piketon, vice-president; Dr. Paul H. Jones, Stockdale, secretary-treasurer; Dr. Robert T. Leever, Waverly, legislative committeeman; Dr. I. P. Seiler, Piketon, public relations committeeman; Dr. A. M. Shrader, Waverly, medical economics committeeman; Dr. L. E. Wills, Waverly, delegate; Dr. Robert M. Andre, Waverly, alternate.—Paul H. Jones, M.D., secretary.

SCIOTO

Wives of members were guests at the Annual Banquet of the Hempstead Academy of Medicine, Monday evening, December 9, at the Valley View Country Club, Portsmouth. The Committee on Arrangements consisted of Dr. Clyde M. Fitch, chairman; Dr. Sol Asch, Dr. S. L. Meltzer, Dr. F. C. Beeks, Dr. O. D. Tatje, and Dr. Wm. E. Scaggs.

The following Portsmouth physicians were elected officers for the ensuing year: Dr. Wm. M. Singleton, president; Dr. Carl G. Braunlin, vice-president; Dr. Sol Asch, secretary-treasurer; Dr. Joseph S. Rardin, legislative committeeman; Dr. Gilbert R. Micklethwaite, delegate; Dr. Dow Allard, alternate.—Sol Asch, M.D., secretary.

Temporary officers of the Woman's Auxiliary, which was organized November 27, include: Mrs. S. L. Meltzer, chairman; Mrs. Dow Allard, vice-chairman, and Mrs. F. C. Beeks, secretary.—News clipping.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

Governor John W. Bricker spoke on "The Growing Functions of Government", at the Annual Dinner Meeting of the Columbus Academy of Medicine, Wednesday evening, December

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18, at the Deshler-Wallick Hotel, Columbus.—Bulletin.

Dr. C. C. Sherburne, President-Elect of the Academy, spoke on "The Enabling Act", at a meeting of the Woman's Auxiliary, Tuesday afternoon, November 26, at the University Club, Columbus.—News clipping.

UNION

Dr. Arthur W. Thomas, chief of the Bureau of Child Hygiene, State Department of Health, was guest speaker at a meeting of the Union County Medical Society, Tuesday, November 12, at Marysville.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

ASHLAND

A Symposium on Heart Diseases was presented at a meeting of the Ashland County Medical Society, Friday evening, December 13, at Ashland. Sound movies produced by the American Heart Association were shown, followed by a discussion of various types and phases of heart disease by members of the society. Members of the Woman's Auxiliary were guests at the dinner.—M. D. Shilling, M.D., president.

Officers of the Woman's Auxiliary are: Mrs. L. G. Sheets, president; Mrs. George M. Emery, president-elect; Mrs. R. L. Shilling, vice-president; Mrs. R. P. Joyce, secretary; Mrs. L. H. Martin, treasurer; Mrs. R. P. Bogniard, corresponding secretary.—News clipping.

LORAIN

Dr. S. O. Freedlander, Cleveland, spoke on "Tumors of the Mediastinum", at a dinner meeting of the Lorain County Medical Society, Tuesday, December 10, at the Lorain Country Club, Lorain.

New officers of the society are: Dr. Russell M. Arnold, Avon Lake, president; Dr. John T. Fawcett, Elyria, vice-president; Dr. Lester H. Trufant, Oberlin, secretary-treasurer; Dr. Charles R. Meek, Lorain, and Dr. George D. Nicholas, Elyria, delegates; Dr. Robert A. Stack, Lorain, and Dr. A. S. McKitrick, Elyria, alternates.—I. L. Levin, M.D., retiring secretary.

MEDINA

Officers of the recently-organized Woman's Auxiliary to the Medina County Medical Society are: Mrs. H. T. Pease, Wadsworth, president; Mrs. John L. Jones, Medina, president-elect; Mrs. John L. Beach, Seville, vice-president; Mrs. R. F. Fasoli, Brunswick, secretary-treasurer.—News clipping.

MEDINA

Six members who have been in active practice more than 25 years were honored at a meeting of the Medina County Medical Society at the Evanon Dining Room, Medina, Thursday night, November 14. They were: Dr. H. P. H. Robinson, Medina; Dr. Harry Streett and Dr. W. H. Scudder, Litchfield; Dr. E. L. Crum, Lodi, and Dr. R. L. Johnston and Dr. E. J. Koontz, Wadsworth.—News clipping.

RICHLAND

The Annual Steak Dinner of the Richland County Medical Society was held at The Fairway, Mansfield, Thursday evening, December 19.—L. D. Bonar, M.D., secretary.

Youngstown—Dr. William M. Skipp, President of the Ohio State Medical Association, in an address before the Canton Rotary Club, assailed governmental control of medical practice and pointed out the advantages of voluntary plans for providing medical service to the low-income groups.

Cleveland—Guest speakers at the ninth annual clinical meeting of the Postgraduate Medical Assembly of South Texas held at Houston, December 3-5, included Dr. Milton B. Cohen.

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Examinations by appointment

ADVANCES IN CANNING TECHNOLOGY

I. Requirements for the Modern Canning Factory

● During the first decade of the 19th Century, Nicholas Appert, an obscure French confectioner, worked out empirically the basic principles of canning. In 1811, the first English edition of his book on the "Art of Preserving" was published (1). This text lays down the fundamentals of the canning process; it describes the necessary organization of a canning establishment and its equipment; and it lists canning procedures for more than 50 foods of both animal and plant origin.

Viewed in the light of modern knowledge, Appert's book is surprisingly complete and many of his observations amazingly accurate. Naturally, in the 130 years since his book was published, many advances have been made in canning technology. Consequently, when Appert's quaintly worded descriptions of the requirements for the use of his process are compared with those of modern commercial practice, some insight may be had as to the vast improvements which have been wrought in this important field of food preservation since its humble beginning.

One striking contrast between the old and new in canning lies in Appert's description of the necessary features of a canning establishment of his day. Appert's establishment apparently was composed of seven rooms or "apartments". Four of these were equipped to handle the preparation of fruits, vegetables, and foods of animal origin; the fifth room was devoted to the cleaning and storage of the glass bottles used as containers; the sixth room was the "sealing" room in which the bottles were corked after filling with food; the last room contained the large covered kettle in which the sealed containers were processed in boiling water.

The requirements for the modern cannery are, of course, much more exacting, both from the standpoint of factory site, arrangement, and equipment. Today, canneries must be located close to the fields, orchards, or waters from which the raw materials are harvested. Rapid handling of freshly harvested raw stock—a prime requisite for quality of the final product—is thus facilitated. The factory site must also be chosen so that an adequate supply of potable water is available. The modern canning plant is arranged specifically for handling the product or products that will be canned. This provides for continuous, rapid, and even flow through the various operations comprising the canning procedure for the particular product.

Needless to state, the equipment requirements of the modern canning factory are also much more complex than in the days of Appert. Present-day, large-volume production—necessary for the manufacture of a low-cost product—requires the use of high-speed automatic equipment for conveying the raw materials through the cleansing, preparatory, and all other operations of the commercial canning procedure. Frequently, much of this equipment must be constructed of special metals or alloys; in all cases it must be so constructed as to permit rapid, thorough, periodic cleansing. To maintain and control this highly specialized machinery, a skilled mechanical staff is necessary.

Space will not permit fuller description of other requirements for the cannery of today. Thousands of such factories combine to form the American canning industry, whose products already have become so essential in our modern civilization and in our national defense. Commercially canned foods have fulfilled every prediction of Appert by whose "extensive practice and long perseverance" a new means of food preservation was made possible.

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REFERENCES

(1). The Art of Preserving All Kinds of Animal and Vegetable Substances, M. Appert, Black, Parry, and Kingsbury, London, 1811.

We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned-foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the sixty-seventh in a series which summarizes, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.

The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

Buckeye News Notes

Bowling Green—Dr. H. J. Powell, Wood County health commissioner for 20 years, has been reappointed for another year, but he will retire on January 1, 1942. He will be succeeded by Dr. A. J. Helm, Custar, who will enter the University of Michigan in February to take a course in public health.

Chillicothe—Principal speakers at a meeting of the Southeastern Division of the fracture section of the American College of Surgeons were Dr. John A. Caldwell, Cincinnati, and Dr. Harlan Wilson, Columbus.

Cincinnati—Dr. M. A. Blankenhorn, professor of medicine, University of Cincinnati College of Medicine, spoke on "Recent Advances in Vitamin Therapy", at the annual clinic of the Highland Park, Mich., Physicians' Club.

Cincinnati—Speakers at the recent annual meeting of the Ohio Dietetic Association included Dr. Gustav Eckstein, Dr. Leon Schiff and Dr. Richard W. Vilter.

Cleveland—Dr. John A. Hindulak spoke on "Medicine in Literature", at a meeting of the Slovak Literary Society.

Columbus—Dr. R. E. Bushong, state commismissioner of mental diseases, spoke on "The Mental Hygiene Situation in Ohio" at a meeting of the Dayton Exchange Club.

Dayton—Dr. E. R. Crew recently resigned as superintendent of Miami Valley Hospital, a position he had held for 28 years.

Dayton—Dr. Homer D. Cassel is the new chief of staff at Miami Valley Hospital, succeeding Dr. A. B. Brower. Dr. Wallace E. Prugh is chief-elect, and Dr. Harold F. Koppe is secretary, succeeding Dr. R. F. Corwin.

Delaware—Dr. G. F. Moench has been re-elected health commissioner of Delaware County. Plans are well under way for a joint health district of Delaware and Union counties, with Dr. Moench in charge.

East Liverpool—New staff officers of City Hospital are: Dr. W. S. Banfield, Irondale, president; Dr. V. E. McEldowney, vice-president, and Dr. J. A. Fraser, secretary-treasurer, and Dr. J. A. Metz and Dr. E. G. Kuhlman, members of the Board of Trustees.

Galion—Dr. O. R. Kackley spoke on "Progress in Medicine", at a meeting of the Business and Professional Women's Club.

Glouster—Dr. B. B. Backley, health commissioner of Athens County, discussed public health work in the county at a meeting of the Jacksonville P.-T.A.

Kenton—Dr. Henri A. Kerns spoke on the Schick Test and diphtheria immunization at a meeting of the local P.-T.A.

Lima—Speakers at the recent annual institute of District 13 of the Ohio State Nurses' Association included Dr. Edward W. Laboe, Dr. A. E. Cremer and Dr. Evelyn Steere, Lima, and Dr. Frank M. Wiseley, Findlay.

Logan—Dr. H. G. Southard, Marysville, has been elected health commissioner of Hocking County.

Marion—Four local physicians spoke on "Rheumatic Fever in Children", at a public panel discussion sponsored by the Marion Federation of the Child Conservation League. The speakers were: Dr. Frederick G. Smith, Dr. D. W. Brickley, Jr., Dr. Frederick W. Rea and Dr. J. W. Bull.

Massillon—"The Common Cold", was the subject of an address made by Dr. H. W. Bell at a meeting of the Orrville Exchange Club.

Middleport—Dr. Frederick M. Cluff spoke on "Children's Diseases", at a meeting of the local Parent-Teacher's Association.

Toledo—Dr. H. M. Shellenberger spoke on "Pyelography", at a meeting of the Toledo Society of X-ray Technicians.

Van Wert—Dr. C. A. Morgan has been reappointed city health commissioner.

Wellston—Dr. Elmer G. Horton, Columbus, district governor of Lions International, was guest speaker at a meeting of the local Lions Club.

Wilmington—Dr. R. W. DeCrow has been reappointed for a two-year term as health commissioner of Wilmington and Clinton County.

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Congress of Industrial Health To Be Held at Chicago, Jan. 13-14

The Third Annual Congress of Industrial Health sponsored by the American Medical Association will be held Monday and Tuesday, January 13 and 14 at the Palmer House in Chicago. The meeting is open to all physicians interested in the problems of industrial health. There is no registration fee. Topics to be discussed include: "The Physician in Industry and National Defense"; "The Special Nature of Industrial Practice"; "Hand Injuries"; "Availability of Trained Industrial Health Personnel"; "Acute Respiratory Disease in Industry", and "Industrial Ophthalmology". Dr. Arthur M. Culler, Dayton, will discuss "Detection and Control of Defective Vision in Industry" in the symposium on "Industrial Ophthalmology".

On Wednesday, January 15, the day following the congress, the Chicago Medical Society will conduct clinics illustrating practical problems in industrial medicine, industrial hygiene and traumatic surgery.

Complete details of the program appear on page 1813 of the November 23 issue of *The Journal of the American Medical Association.*

Special Military Journal Planned

Beginning in January the American Medical Association will publish *War Medicine,* a periodical containing original contributions, news and abstracts of articles of military, naval and similar interests pertaining to preparedness and war service. *War Medicine,* to be published bimonthly, is designed to help every physician keep up with the various phases of medical service under military conditions. The editorial board will be the Committee on Information of the Division of Medical Sciences of the National Research Council, of which Dr. Morris Fishbein, Editor of *The Journal of the A.M.A.,* is chairman. Representatives of the Army and Navy Medical Corps and the United States Public Health Service have been chosen to cooperate with the board. The subscription price is $5 per year. Orders may be sent to the American Medical Association, 535 North Dearborn St., Chicago.

Dayton—Speakers at the semi-annual meeting of the Ohio branch of the American Physiotherapy Association included Dr. Herbert L. Brumbaugh, Dr. James O. Beavis, Dr. Roy D. Arn, and Dr. Wm. Richard Hochwalt.

Columbus—Dr. Myron D. Miller, superintendent of the Franklin County Sanatorium, was the guest speaker at the annual dinner of the Pickaway County Public Health League.

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*Arch. Otolaryng. 17:787, 1933

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Excellent Program Presented at Annual Health Commissioners' Conference

An excellent program featured the 21st Annual Conference of Health Commissioners held at the Deshler-Wallick Hotel, Columbus, December 12-13. The meeting was opened Thursday afternoon by Dr. R. H. Markwith, State Director of Health, followed by an address by Dr. E. R. Coffey, surgeon, U. S. Public Health Service, on "Environmental Sanitation", and a talk on "Milk Sanitation" by A. W. Fuchs, senior sanitary engineer, U. S. Public Health Service.

At the Friday morning session, Dr. H. T. Dean, U. S. Public Health Service, spoke on "Mottled Enamel"; Sophie C. Nelson, R.N., director, visiting nursing service, John Hancock Mutual Life Insurance Company, Boston, Mass., discussed "Duties of a Public Health Nurse in a Local Health Department", and Dr. Walter M. Simpson, Dayton, director, Kettering Institute for Medical Research, spoke on "Tularemia". Dr. Frank Boudreau, executive director, Millbank Memorial Fund, New York City, was guest speaker at luncheon.

The meeting closed Friday afternoon with addresses by Dr. Don W. Gudakunst, medical director, National Foundation for Infantile Paralysis, New York, on "Poliomyelitis", and by Dr. R. S. Dixon, assistant professor of public health and preventive medicine, Wayne University College of Medicine, Detroit, on "The Local Health Officer's Approach to the Control of Syphilis".

Hospital Plans Continue To Grow

Total participants in hospital service plans approved by the Commission on Hospital Service of the American Hospital Association was 5,607,195 on October 1, 1940, compared with 4,013,000 on October 1, 1939, a net increase of 1,594,195 in 12 months. Total enrollment for the eight plans approved in Ohio, as of October 1, 1940, was 633,243, distributed as follows:

Hospital Service Association of Summit County, Akron	41,685
Hospital Service Inc., of Stark County, Canton	15,021
Hospital Care Corporation, Cincinnati	65,814
Cleveland Hospital Service Association	375,701
Central Hospital Service Association, Columbus	13,301
Portsmouth Hospital Service Association	4,976
Hospital Service Association of Toledo	65,784
Association Hospital Service of Mahoning County, Youngstown	50,961

Cleveland—Dr. Russell L. Haden conducted an all-day institute at the Detwiler Memorial Hospital, Wauseon, November 28. A medical clinic was held in the morning and the afternoon session was devoted to a discussion of "Clinical Nutritional Deficiency Disease".

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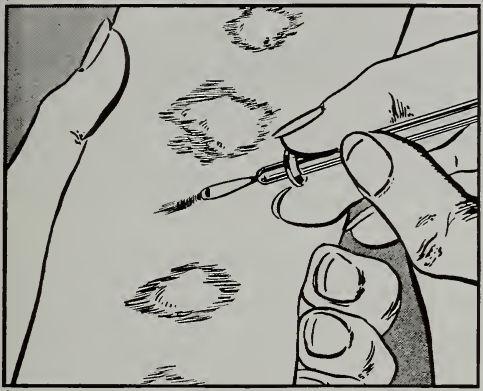

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FRACTURES AND TRAUMATIC SURGERY—Two Weeks Intensive Course starting March 10th and May 5th. Informal Course every week.
GYNECOLOGY—Two Weeks Intensive Course starting February 24th and April 7th. Clinical, Diagnostic and Didactic Course every week.
OBSTETRICS—Two Weeks Intensive Course starting April 21st. Informal Course every week.
OTOLARYNGOLOGY—Two Weeks Intensive Course starting April 7th. Informal and Personal Courses every week.
OPHTHALMOLOGY—Two Weeks Intensive Course starting April 21st. Informal Course every week.
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The Physician's Bookshelf

Love at the Threshold, by Frances Bruce Strain *(D. Appleton-Century Company, New York;* $2.25), is a book on Dating, Romance and Marriage. Mrs. Strain's discussion of the details of these subjects which are so important to the adolescent and the young adult of both sexes is frank, practical, sincere, and sympathetic. Another good book for the reading table of the family library.

Maybe Tomorrow, A Nurse's Story, by Irene Kroth *(Meador, Boston;* $2.00), is the story of a girl who comes from Holland and enters a nursing sisterhood in America. She leaves her Deaconess Order and marries. This quest for happiness finally runs into the all too frequent tragedy in which one partner carries the responsibility for the preservation of the union. Why doesn't she leave him? Why does he stay with her? Well, it is a good story with a good philosophy —maybe tomorrow.

Let's Talk About Your Baby, by H. Kent Tenny, Jr., M.D. *(University of Minnesota Press;* $1.00), has passed the hands of many of the doctor's private patients, then through the more critical hands of all the members of the staff of the Child Welfare Institute and the Department of Pediatrics at the University of Minnesota. As the famous Joseph Brennermann says of it in his introduction to the book, "It can be heartily recommended to any mother who wants just the right kind of useful and reliable information and practical help"—and it is all done so attractively and so whimsically.

For Daughters and Mothers, by Valeria Hopkins Parker, M.D. *(Bobbs-Merrill Company, Indianapolis;* $1.50), is a guide through the difficult problems that beset a girl in her early teens. It is much more than a sex book although the subject is well treated. It not only covers the difference between real and "Movie" romance, but also the advantage of a career and the place of women in the community.

Practical Dietetics With Reference to Diet in Health and Disease, by Alida Frances Pattee *(A. F. Pattee, Publisher, Mount Vernon, New York;* $3.00), is just what its title would indicate. The author has been assisted by an outstanding group of physicians who are specialists in their fields. Previously intended for nurses, it finds a welcome place on the bookshelf of the physician.

Transition Years. The Modern Approach to "Changes in Womanhood" by Joseph Rety, M.D. *(Greenberg, 67 W. 44th St., New York;* $1.75), contains the practical advice of an experienced gynecologist to women who are approaching this important period. Banishing fears, his advice is most helpful and represents the best that the modern physician has to offer.

In Search of Complications, by Eugene de Savitsch, M.D. *(Simon and Schuster, New York;* $2.50), is the biography of an unusual physician, told in a most interesting manner, and still explaining the significance of most of what the author has experienced with war, revolution, starvation, despair, sickness, failure, loneliness and achievement. Added to his first rate medical data, it makes a book most physicians and their families will enjoy.

An Introduction to Bio-Chemistry, by William R. Fearon, of Trinity College in Dublin *(C. V. Mosby Company, St. Louis;* $3.75), is an extensive revision of a very practical text.

Worry and Disease, by Edward Podolsky, M.D. *(Rodale Press, Emmaus, Pa.;* $1.00), is a series of essays on the influence of worry on the human body. The story is told in keeping with the modern method.

Sex Adjustments of Young Men, by Lester A. Kirkendall *(Harper & Bros., New York;* $2.00), is frank, serious discussion of these problems by an experienced counsellor of youth. One of the very best of its kind.

Sex in Marriage, by Ernest R. Groves and Gladys Hoagland Groves (2nd Edition; *Emerson Books, New York;* $2.00), gives essential information clearly and limits itself to the problems indicated by the title. This edition is even better than the last which was generally recognized as authoritative, readable and complete.

Neoplastic Diseases. A Treatise on Tumors, by James Ewing, M.D. (4th Edition. *W. B.*

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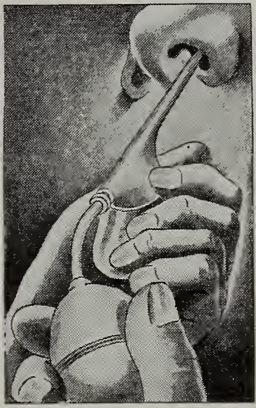

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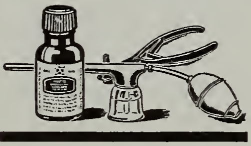

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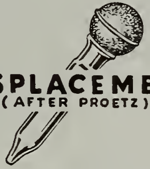

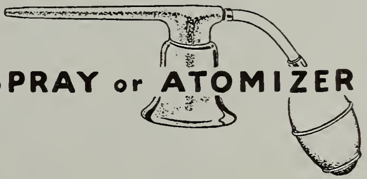

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Saunders Co., Philadelphia; $14.00), brings up to date this most important monograph. The book is readable and informative on all types of new growths.

Behind the Surgeon's Mask, by James Harpole, M.D. ($2.75. *Frederick A. Stokes Co.),* is another volume by the author of Leaves From A Surgeon's Case-Book and Body Menders. This eminent Harley Street surgeon writing under the name of James Harpole unravels many dramatic medical mysteries for the layman and unlike many such it makes very good reading for the medical man as well.

The 1940 Year Book of Public Health, by J. C. Geiger, M.D., Director of Public Health for the county and city of San Francisco. ($3.00. *Year Book Publishers, Inc., Chicago),* is the first annual summary of the vast literature covering public health. There has long been a real need for such a volume and the editor of this book has done an excellent job.

Food, Nutrition, and Health, by McCollum and Becker ($1.50. *Published by the authors at East End Post Station, Baltimore, Md.),* is the entirely rewritten fifth edition of this well known classic. No one interested in nutrition can afford to be without it.

Makers of Nursing History. Portraits and Pen Sketches of One Hundred and Nine Prominent Women, edited by Meta Rutter Pennock ($2.50. *Lakeside Publishing Co., New York),* is an happy attempt to tell the story of the nursing profession by means of biographical sketches. This method appeals mightily to your reviewer who has always wanted to teach the history of medicine in the same way.

Text-Book of Ophthalmology, by Sir W. Stewart Duke-Elder, volume iii. Diseases of the inner eye with 1140 illustrations including 164 in color ($18.50. *C. V. Mosby Co., St. Louis),* is a great book both in size and content. A complete text from which nothing has been omitted and in which all has been treated clearly and to the point. With its two companion volumes it makes one of the great contributions to Medicine.

A Treatise on Medicolegal Ophthalmology, by Albert C. Snell of the University of Rochester ($6.00. *C. V. Mosby Co., St. Louis),* is the first book of its kind since 1902 and therefore with excellence deserves a place in the library of every eye physician and every industrial surgeon.

Progress in Medicine, by Iago Goldston, M.D. ($3.00. *Alfred A. Knopf, New York City),* is sweeping story of the rise of modern medical science and serves to orient its reader as no other book of recent times. A knowledge of the facts presented is necessary to each of us. The

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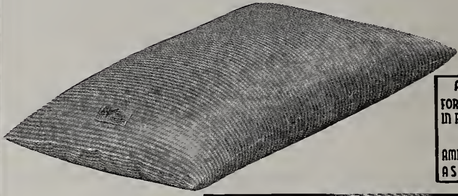

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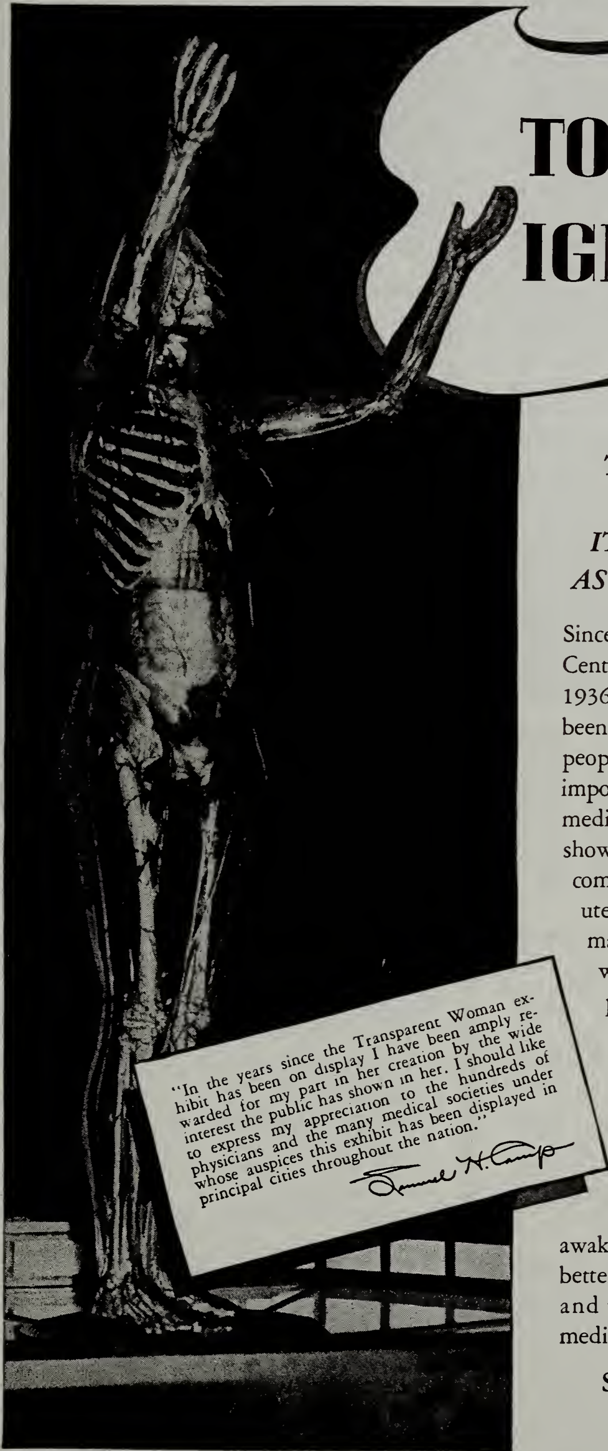

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Since it was first unveiled at Rockefeller Center, New York, during the Summer of 1936, the Transparent Woman exhibit has been viewed by more than eight million people. It has been exhibited in many of the important cities in America and at several medical conventions. Wherever it has been shown it has been accorded a significant welcome. The world of medicine has paid tribute to the science, skill and purpose which made this exhibit possible—and the lay world has acclaimed this figure for its part in dispensing authentic knowledge of the complicated internal structure of the female body. The exhibit was recently donated as a permanent one to the Medical Section of the great Museum of Science and Industry, Jackson Park, Chicago, where it is our hope she will continue to awaken additional millions of people to a better understanding of their physical selves and the vital importance of professional medical counsel.

"In the years since the Transparent Woman exhibit has been on display I have been amply rewarded for my part in her creation by the wide interest the public has shown in her. I should like to express my appreciation to the hundreds of physicians and the many medical societies under whose auspices this exhibit has been displayed in principal cities throughout the nation."

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book is therefore recommended to all physicians who are interested in knowing why they do what they do and what the probable trends of our science are.

Asthma and the General Practitioner, by James Adam ($2.00. *A William Wood Book, Baltimore),* is an excellent treatise by a Scotch physician whose record speaks for itself. The author has a very original mode of attack which he discloses in a lively manner. His thesis is that asthma is the result of bad nutrition and indoor life leading to a depressed function of the autonomic system and the ductless glands with disturbed ferment action and toxicosis. This places allergy where it belongs as a part of Internal Medicine and not as separate specialty.

Expectant Motherhood, by Nicholson J. Eastman, M.D., of Johns Hopkins ($1.25. *Little, Brown, and Co., Boston),* is an excellent book of advice during pregnancy supplementing the information which the attending physician gives. From his large experience, the author seems to know all those details which may be overlooked in the consultation room.

Obstetrics in General Practice, by J. P. Greenhill, M.D. ($3.50. *Year Book Publishers, Inc., Chicago),* is a companion volume to the author's Office Gynecology. An excellent practical manual.

Vitamin Therapy in General Practice, by Edgar S. Gordon, M.D., and Elmer L. Servinghaus, M.D., of the University of Wisconsin $2.75. *Year Book Publishers, Inc., Chicago),* is a book which meets a real need in the libraries of most of us. It brings together the vast literature on this subject so that we may use it in our daily work.

A Surgeon's Autobiography, by Hugh Young ($5.00. *Harcourt, Brace and Company, New York),* is the story of the outstanding urological surgeon and head of James Buchanan Brady Urological Institute in Baltimore, in which he tells of his boyhood in Texas, his education at the University of Virginia, his years at Johns Hopkins, and his work in the A.E.F. and British and French armies during the first World War. Included is a non-technical account of many urological cases and operations exhibiting the author's instruments and new techniques.

Diagnosis and Treatment of Cardiovascular Disease, edited by Wm. D. Stroud. ($18.00. *R. A. Davis Company, Philadelphia).* A complete work written by an impressive list of cardiologists. It is complete and practical being written from the clinical point of view but omitting none of the recent studies. There is a comprehensive discussion of traumatic heart disease as well as a discussion of the use of digitalis in enlargement of the heart. Each article written by the 57

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authors deserves comment but would be much better read. The two volumes meet a need of every physician interested in the cardiovascular system.—H. M. Clodfelter, M.D.

The Chinese Way in Medicine, by Edward H. Hume ($2.25. *The Johns Hopkins Press, Baltimore)*, tells much about the subject in three lectures entitled: (I) The Universe and Man in Chinese Medicine; (II) The Founders and Conspicuous Examplars of Chinese Medicine; and (III) Some Distinctive Contributions of Chinese Medicine. Every physician who is interested enough in his Art to attempt to build a real background for his own work will want to read and reread this little volume.

Psychotherapy, by Lewellys F. Barker, M.D. ($2.00. *D. Appleton-Century, New York)*, fills an important place for most of us who must use either through knowledge or intuition this helpful method in getting each of our patients willing to face their problems.

A Doctor Without a Country, by Thomas A. Lambie, M.D. ($2.00. *Fleming H. Revell Co., New York)*, is the story of the life work of a physician who gave up his citizenship in the U.S.A. to become a citizen of Ethiopia. His story leads up to and includes the Italian invasion. If you want a real thrill on some stormy night just curl up with this autobiography.

Bacillary and Rickettsial Infections, Acute and Chronic, by William H. Holmes, M.D., of Northwestern ($6.00. *Macmillan Co., New York)*, is one of the orientations in medicine monographs. It is an excellent work on infectious diseases but it is much more than that. It relates all this information to civilization and shows that our medical knowledge is not the result of brilliant discoveries but of slowly accumulative experiences of priests, philosophers, chemists, physicists, and physicians. Do not miss it is my advice.

Obesity and Leanness, by Hugo R. Rony, M.D. ($3.75. *Lea & Febiger, Philadelphia)*, is a timely and comprehensive summary of our knowledge upon a subject which has been popular for these fifteen years. It, therefore, has a place in every physician's library.

New and Nonofficial Remedies, 1940, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1940. Cloth. Price, postpaid, $1.50. Pp. 656-LXVIII. Chicago: *American Medical Association*, 1940.

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Community Hygiene, by L. B. Chenoweth, M.D. and W. R. Morrison, M.D. *(F. S. Croft & Co., New York;* $2.00), is a textbook on the broader aspects of hygiene by the professor of Hygiene in the University of Cincinnati and Oberlin College. Hygiene is presented here for its cultural worth and its intellectually stimulating powers as well as its practical value in making the student a healthy, normal human being.

Cancer in Childhood, and a Discussion of Certain Benign Tumors, edited by H. W. Dargeon, M.D. *(C. V. Mosby Company, St. Louis*; $3.00), is a symposium presenting the collective efforts and experiences of the staff of the Memorial Hospital for Cancer in New York.

Untoward Effects of Nitrous Oxide Anesthesia, with Particular Reference to Residual Neurologic and Psychiatric Manifestations, by Cyril B. Courville, M.D. *(Pacific Press, Mountain View, California;* $4.75), is a monograph that deserves most careful study by all who have to do with this form of anesthesia. It shows not only the immediate danger but also the delayed effects. This does not condemn the anesthetic but it does mean that all who use it should know of its dangers and do everything to prevent them.

Introduction to Medicine, for Schools of Nursing, by Don C. Sutton, M.D. *(C. V. Mosby Company, St. Louis;* $3.25), is a carefully planned and well executed text amply fulfilling the purpose of its author.

Clinical Heart Disease, by Samuel A. Levine, M.D. (2nd Edition, *W. B. Saunders Company, Philadelphia;* $6.00), follows the plan of the first edition in being an individualistic treatise by a well known authority. A discussion of the precordial lead and the electrocardiogram has been changed to conform to standardized nomenclature, and a brief discussion of heart disease has been added. In all, a book that can be heartily recommended.

A Textbook of Pathology, by W. G. MacCallum, M.D. (7th Edition, *W. B. Saunders Company, Philadelphia;* $10.00), is the most recent edition of this oustanding textbook which as teacher and practicing physician your reviewer has kept

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Compendium of Regional Diagnosis in Lesions of the Brain and Spinal Cord. A Concise Introduction to the Principles of Localization of Diseases and Injuries of the Nervous System, by Robert Bing (11th Edition, *C. V. Mosby Company, St. Louis;* $5.00), has brought up to date that excellent text which we bought and enjoyed in our student days some 30 years ago.

Modern Dermatology and Syphilology, by S. William Becker, M.D., and Maxmillian E. Obermayer, M.D. 461 illustrations and 32 full color plates ($12.00. *J. P. Lippincott Company, Philadelphia*) presents this subject from a biological point of view i.e., as a part of a disease process instead of static pictures. Usefulness has been the prime consideration in this work. At the beginning of each chapter is incorporated explanatory material designed to orient the reader, done in the intimate language of the demonstrator. It deserves careful reading by all of us.

An Atlas of the Commoner Skin Diseases, by Henry C. G. Semon of the Royal Northern Hospital ($12.00. *William Wood, Baltimore*) in the second edition of this valuable British Atlas. It is one of the best of its kind.

Manual of Medical and Surgical Emergencies. Edited by J. C. Geiger, M.D., Director of Public Health, San Francisco (*J. W. Stacey, Inc., San Francisco*) presents a book containing specific information on emergency hospital practice. It belongs in the intern library of every hospital and physician encountering emergencies.

Endocrine Therapy in General Practice, by Elmer L. Sevringhaus, M.D. ($2.75. Third edition. *The Year Book Publishers, Inc., Chicago*) has been entirely reset with many additions, bringing the book strictly up to date. It can be heartily recommended not only because of its authority but because it has been presented so as to be of greatest help to the busy practitioner.

Gynecological and Obstetrical Pathology, with Clinical and Endocrine Relations, by Emil Novak, M.D., (*W. B. Saunders, Philadelphia*) presents the material needed to do work in this field without being too brief or too encyclopedic. What makes it of so much value is the fact that it presents clearly the working knowledge of pathology of this outstanding authority.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 February, 1941 No. 2

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Treatment and Complications of the Common Cold

HENRY M. GOODYEAR, M.D.

IT is generally conceded that colds are caused by a filtrable virus. Ordinarily, at least three to five types of organisms can be cultured from the nose at any time, and especially during the winter months. These organisms seem to be activated by the cold virus, and when we first discover the cold the nose is swollen and there may be a beginning heavy secretion and many organisms present.

Are colds preventable? Yes. People in perfect health, who are not careless in their habits of eating, and exposure to fatigue, wet, and sudden changes of temperature, may go for years without any disturbance. Not infrequently I have patients come to me with an acute cold, following cocktails and overeating just before the onset. It is just as intemperate to overeat as it is to consume quantities of alcohol.

I find many acute colds follow wet feet. The patient wears shoes, the soles of which are not waterproof, or, early in the Spring they walk on damp cold ground, lured by the Spring air and sunshine. I feel that every man should have at least one pair of shoes with waterproof soles. I find that a worn pair of shoes may be resoled with a composition that is comfortable and waterproof. These shoes should be worn when there is evidence of rain or wet weather. If the feet do get wet and cold, the shoes and socks should be changed.

Girls are particularly prone to wet feet and colds since they wear thin shoes, and without rubbers. I advise toe rubbers for these people, which will cover the sole of the shoe, and can be carried even in a handbag for an emergency.

Many athletes, or men who play golf, will play on a cool day, take a shower immediately thereafter and then drive home in their car with the windows open, and thus invite an acute cold. It takes two hours to cool out a horse after severe exercise, and a man would be much safer if he cooled slowly by mild exercise, or walking, and refrained from bathing for one or two hours after athletics.

Alcohol followed by large quantities of food lays one liable to infection.

The axiom, an hour of sleep before midnight is worth several hours after, still hold good. People cannot expect to be well, and go to bed at one o'clock in the morning, and get up at seven for the work of the day. I feel that at least eight hours of sleep are necessary for the average person to maintain the maximum of health. I believe that most people are better, who sleep in a room with a temperature of 56 to 68, rather than at temperatures considerably lower. Many patients feel that they must have a large window, wide open, in order to get sufficient air. You may ask these patients to compare the size

The Author

● Dr. Goodyear, Cincinnati, Ohio, is a graduate of Northwestern University School of Medicine, 1915; fellow American College of Surgeons; fellow American Laryngological Association; fellow American Otological Society; member American Academy of Ophthalmology and Otolaryngology; associate professor of Otolaryngology, College of Medicine, University of Cincinnati.

Submitted October 26, 1940.

of the openings into the nose with the opening in the window to convince them that a window open even a small way will give them much more fresh air than they can possibly use.

The nose normally secretes from a pint to a quart of fluid a day. This fluid moistens the air passing to the lungs, and it is important to have a house in cold weather at the proper humidity, which means, ideally, that the moisture must be at the point of condensing and running down upon the window sills, and in extreme weather even at the point of condensation the humidity will still be low.

I have patients tell me that they use drops in their nose each day as a preventive toward colds. This is a bad practice, and is unnecessary. If the breathing space is bad, caused by an obstruction in the nose, or by allergy, an attempt should be made toward their correction. Often the correction of a badly deflected septum will relieve pressure on the middle turbinates and help to prevent the complications of nasal sinus infections which occur with acute colds, particularly where there is little room for drainage or aeration through the normal air passage.

Even if the removal of tonsils and adenoids does not greatly reduce the number of attacks of cold, if the operation is properly advised the patient is greatly protected against the many complications that may occur with obstructed nasal breathing and a possible infection of the ears or nasal sinuses.

REMOVAL OF TONSILS AND ADENOIDS

Here I wish to emphasize especially that the age must not be the guide as to the time when tonsils and adenoids should be removed. Occasionally I have children brought to me at the age of five or six years with high arched palates and typical adenoid faces who should have been operated perhaps several years before, but the mother states that the family doctor told her not to worry about the tonsils and adenoids before the child was five or six years of age. This delay in operation is, indeed, unfortunate, for the child has acquired a handicap for life. To let a child continue as a mouth breather, as a result of enlarged adenoids, may mean a permanent deformity.

Mineral oils dropped in the nose of an infant may cause hypostatic pneumonia. I can never understand why doctors order medicine to be dropped in the nose of an infant every three hours without realizing that one drop of medicine at each application would be as effective as a number of drops. If drops are to be used let it be an isotonic solution, containing one-fourth per cent neosynephrine or other synthetic ephedrine. Never use adrenalin in an acute cold.

There is no objection to the use of an atomizer, and it is very effective if used properly. Spray gently, then wait five minutes, and spray again if necessary. These intervals will permit the nose to open so the spray can finally reach the upper part of the nasal passage.

Local treatment of the nose is important as to air and drainage, and not as to disinfection. The nose cannot be sterilized. Warm steam inhalations, whether medicated or not, are always helpful in upper respiratory infections. A benzedrine inhaler may be used sparingly even in an infant, if not held too close to the nose, and no harm will be done, and, often the nose opens with considerable relief.

TREATMENT OF ACUTE COLDS

Acute colds are not usually best treated by taking large quantities of orange juice, soda or soft drinks, as so frequently advocated over the radio. The nasal secretions are normally slightly acid, thus offering the greatest resistance to bacterial growth. As you know a slightly alkaline media is used in laboratories for the culture of bacteria. No laboratory grows streptococci on an acid media. Is it reasonable then that we should attempt to create an alkaline condition in the body? I feel sure that in many cases when the body secretions shift from their normal slightly acid reaction to the alkaline side, bacteria, accompanying acute infection, find their field for growth. Alkaline treatment has been broadcast beyond its true value. The drinking of a level teaspoonful of table salt in a glass of cold water at the onset of a cold, even repeated several times the first day, often will do more good than any of the alkaline drinks.

I realize that occasionally a patient gets some relief from alkaline drinks in the treatment of a cold, but, I believe the number of patients in an acid state at the onset of a cold is comparatively small. An advantage of giving a chloride is that it may be used either on the alkaline or acid side as needed by the body.

Two tablespoonsful of strained honey with the juice of one-half of a lemon in a glass of hot water, sipped at bedtime, is an ideal drink in the treatment of colds. Our forefathers recognized honey as a valuable adjunct in medicine.

Cathartics, unless positively indicated, have no place in the treatment of an acute cold. They decrease the body fluids, deplete the patient, and prolong a cold from one to two days.

Coughs, lasting more than two weeks, unless proved otherwise, can be considered due to a sinus infection. Unless these sinuses and cough are cured immediately in children, a beginning bronchiectasis occurs. The golden opportunity has been lost, and a condition far more incurable than tuberculosis has arisen. The antra are the most frequent offenders in prolonged infections in children. This also holds good in adults. With each antrum infection there is also some ethmoid infection, but once the antrum infection is relieved the ethmoid cells usually clear. I prefer to inject the antra with 27 per cent iodine in oil every 10 to 14 days in the subacute or chronic cases, and watch the progress by roentgeongraphs. If the infection persists, large permanent openings should be made into the antrum under the inferior turbinate, except in children under two or three years of age, when the middle meatus may be used. Antra have a tendency to become water-logged by too frequent irrigations. Very often a patient who has had frequent or daily irrigations will improve by merely stopping treatment for ten days and permitting the cavity to dry out.

If bronchiectasis is suspected, after cocainizing the nose and trachea, the tongue is pulled forward, and the oil injected into the nose and allowed to flow into the bronchial tree, followed immediately by roentgenographs.

We see many children who have frequent colds and a marked hypertrophy of the lymphoid tissue on the posterior pharyngeal wall. This finding usually is an indication for the administration of small doses of iodine, and if the membranes are particularly pale and swollen, one-fourth to one-half grain of thyroid may be given with one or two grains of iodine per day. Incidentally, even the disposition of these children often is greatly improved by the use of iodine, in small doses.

We must be constantly guarding against the consumption of large quantities of sweets and soft drinks; honey makes an excellent substitute, and does not ferment in the intestinal tract. Excess of starches is to be considered.

ALLERGIC OR VASOMOTOR RHINITIS

The question of allergic, or vasomotor rhinitis, often comes up for differentiation. This is not difficult as there is usually a history of attacks of sneezing each day, sometimes accompanied by an itching sensation of the eyes and the roof of the mouth, without sore throat or temperature. This picture is characteristic of allergy. At the same time in a large percentage of these cases there is a history of hay fever, asthma, or allergy in the family. The nasal membranes are usually swollen, wet, and very pale and microscopic examination of the secretions shows many eosinophils.

One must be conservative in advising radical nasal surgery in allergic patients. On the other hand any obstruction to breathing caused by a badly deflected nasal septum should be corrected, and any chronically infected sinuses may require drainage at the same time.

Vaccines give no assurance of immunity to colds, and oral vaccine, taken twice each week through the winter months, is probably equally effective. I do feel that vitamins are important to the general health and in the prevention of frequent colds. Small doses of minerals may be added in the form of some good mineral tablet combined with organic calcium.

The general habits of the patient are to be considered. Breakfast is the most important meal of the day to be considered. Many people have nothing more than a portion of carbohydrate in the form of toast and coffee or rolls. Eating a good breakfast is a matter of habit, and should be cultivated from childhood. Some fruit or fresh fruit juice, bacon and an egg gives protein, and some protein rather than an all carbohydrate breakfast is important.

At breakfast time most people have not had food for twelve hours, and are apt to go another five to six hours before lunch. After lunch they may eat again within five to six hours, thus, without breakfast, they take most of their food for the 24 hours in a period of five or six hours. People of good vitality usually appreciate a good breakfast.

556 Doctors Building.

Newer Treatment of Parkinson's Syndrome

The treatment of Parkinson's syndrome and of paralysis agitans has been notoriously unsatisfactory. Despite treatment, the typical course of the disease has been one of steady progression, eventuating in the complete incapacity of the patient. Exceptional cases have received partial relief by the use of atropine, stramonium, or hyoscine, but in none of these has the result been striking or permanent.

Treatment with extracts of belladonna root was introduced in 1929 by Ivan Raeff, of Bulgaria. Following this introduction, clinical experiences in the use of English and Bulgarian belladonna root were accumulated in England and in continental Europe. The results were uniformly excellent. In England, Neuwahl reported improvement ranging from a slight degree, to symptomatic cure, in 92.4 per cent of his 118 cases; Alcock noted improvement in five difficult cases; and Dennis Hill reported improvement in 11 of 14 cases. In Italy, Gaundellini felt certain that 120 of his 150 cases were improved, and Panegrossi has reported cure of the disease.

Encouraging reports are now appearing in American literature. Neal published a preliminary report of improvement obtained in chronic encephalitic Parkinsonism; Fabing noted improvement of from slight to marked degree in 22 of 23 cases; and Vollmer reported improvement in 14 of 16 cases of postencephalitic Parkinsonism and seven of 10 cases due to arteriosclerosis.—Samuel Alexander, M.D. and Stewart F. Alexander, M.D., Park Ridge, N. J.; Jour. Med. Soc. of New Jersey, Vol. XXXVII, No. 12, December, 1940.

A Recrudescence of Diphtheria

ABRAHAM GELPERIN, M.D.

SUBSEQUENT to the initiation of mass prophylaxis of diphtheria in Cincinnati in the autumn of 1928, there was a marked decrease in diphtheria morbidity. However, despite the inoculation of approximately 50 per cent of all pre-school children, and 75 per cent of the age group five to nine by 1935,* the number of cases of diphtheria increased in 1933 and assumed alarming proportions by 1935 (Fig. 1). It was therefore deemed advisable to determine, if possible, the factors responsible for this recrudescence.

First, the efficacy of diphtheria prophylaxis, per se, was evaluated. The Madisonville suburb of Cincinnati was chosen for this investigation for the following reasons:

1. The population turn-over is small.
2. The great bulk of residents, only a relatively few being Negro, live in one- or two-family houses.
3. The recreational facilities are complete enough to keep the children well segregated in their own community.

These conditions minimize the "contact" factor and allow for an evaluation of the degree and permanence of Shick negativity attained through prophylaxis.[1,2]

In December, 1935, 1,570 children out of a school population of 2,200 were Shick tested, as were a group of 199 pre-school children, a total of 1,769 children. Of this group, eight had had diphtheria, 15 had had more than one course of immunization, and 100 gave protein-type skin reactions. Deleting these three groups leaves a total of 1,646 available for study.

Three antigens had been employed for immunization. Toxin-antitoxin was the first inoculant used and was the sole agent administered from 1928 through 1930. Three subcutaneous injections were given at weekly intervals. Ramon toxoid supplanted toxin-antitoxin during 1931, and was given in two weekly injections. This in turn was superseded in the autumn of 1934 by one inoculation of alum-precipitated toxoid.* In the summer of 1930, a group of children who had received three injections of toxin-antitoxin during the previous winter were re-inoculated with a fourth injection. Of this group, 167 were Shick tested. Three hundred and nineteen uninoculated children serve as a control unit.

The Author

● Dr. Gelperin, Cincinnati, Ohio, is a graduate of University of Cincinnati College of Medicine, 1931; member American Public Health Association; member of staff Cincinnati Department of Health; clinician, Heart Clinic, Cincinnati General Hospital; assistant, department of internal medicine, University of Cincinnati.

A comparison of the results of the Shick tests in the various categories indicates that the degree of Shick negativity is dependent upon the number of injections (Table I).

The 121 children who had had alum-precipitated toxoid were tested less than nine months after inoculation and so are not strictly comparable. If the control unit is evaluated by age groups, it may be seen that, statistically, age is not a variant (Table II). Age, per se, can be a variant only by virtue of the fact that older age groups have had a longer time in which to allow the "contact" factor to operate.

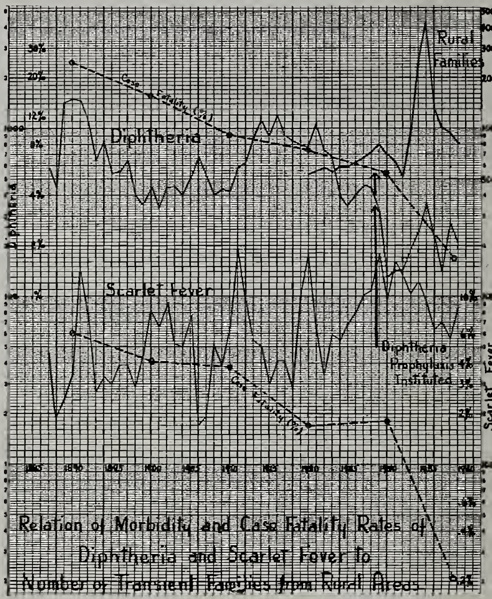

FIGURE 1

If the latter is of negligible importance, as in rural or non-congested urban areas, age ceases to be of consequence. It is therefore evident that prophylactic inoculation raised the negative Shick

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*The newborn of all resident families are routinely visited by our nursing staff; and, with the delivery of the birth certificate and on re-visiting nine months later, parents are educated to the value of diphtheria prophylaxis. The program of diphtheria prevention is being carried out in cooperation with the Cincinnati Academy of Medicine.

*The technic recommended since 1936 is two injections of alum-precipitated toxoid at least four weeks apart.

Submitted September 4, 1940.

TABLE I

Reactions to Shick Test Tabulated by Type of Diphtheria Prophylaxis Used

Antigen	No. of Injections	Year of Innoculation	Total Cases	Positive Shick, %	Negative Shick, %
T. A. T.	3	1928-1931	524	38.4	61.6
T. A. T.	4	1929-1930	167	35.3	64.7
Ramon Toxoid	2	1931-1934	515	45.8	54.2
Alum Precipitated Toxoid	1	1934-1935	121	16.5	83.5
Control No antigen	0		319	69.3	30.7

TABLE II

Percentage of Positive Shick Tests in Uninoculated Children—Tabulated by Age Groups

Age Group	No. of Cases	Positive Shick Test, %
2—4	7	71.4
5—7	46	71.7
8—10	100	68.0
11—13	131	68.7
14—16	35	71.4

level from its norm of 30.7 per cent to a level 24 to 34 per cent higher.

Four months later, in April, 1936, 379 positive reactors were again Shick tested. The expected marked reversals[3,4] are immediately evident (Table III).

In contrast is the relative stability of the the uninoculated group.

In April, 1939, 117 children who had been re-Shicked as well as 421 who had not, were again Shick tested. It is observed (Table IV) that there was both a rise of approximately 25 per cent in the herd Shick-negative level, as well as a significant fluctuation of reactions to the Shick test. The various Shick-negative levels again seem to be dependent upon the number of inoculations. Of special interest is that segment of positive reactors which remained positive in spite of the added stimuli of Shick tests.[3,5]

There were no cases of diphtheria in Madisonville proper from 1930 to 1935, when nine cases occurred. Subsequent to this relapse there has been one case of diphtheria each year. This recrudescence and the continued smouldering character of the disease probably explains the increase in Shick negativity observed in 1939. The local epidemic was coincident with a marked

TABLE III

Retest of 379 Positive Shick Reactors Four Months After Original Test

Retest Result	Antigen				Totals
	T. A. T. (3)	Toxoid	Alum	Control	
Positive	71	75	2	86	234
Negative	36	45	0	14	95
Protein	41	1	0	8	50
Totals	148	121	2	108	379

TABLE IV

Results of Repeat Shick Test—April, 1939

Antigen Employed	No. of Injec-tions	Dates of Shick Tests		Total Cases	Dates of Shick Tests			Total Cases
		Dec. '35	April '39		Dec. '35	April '36	April '39	
Control Group	0	+	+	15	+	+	+	8
		+	—	5	+	+	—	1
		—	—	20	+	—	+	1
		—	+	1	+	—	—	3
T. A. T.	4	+	+	1	+	+	—	4
		—	—	20	+	—	—	9
		—	+	2				
T. A. T.	3	+	+	7	+	+	+	11
		+	—	11	+	+	—	6
		—	—	115	+	—	—	22
		—	+	6	+	—	+	2
Toxoid	2	+	+	20	+	+	+	20
		+	—	14	+	+	—	5
		—	—	128	+	—	—	22
		—	+	14	+	—	+	3
Alum	1	+	+	3				
		+	—	5				
		—	—	28				
		—	+	6				

1939 Negative Shick Level

Control 53.7%
T. A. T. (4) 91.7%
T. A. T. (3) 85.6%
Toxoid 74.8%
Alum 78.6%

rise in diphtheria morbidity in the city as a whole. The new factor that appeared, both in Madisonville and especially in Cincinnati proper, was a marked increase in the number of new residents from rural and small urban communities.

In the years prior to 1932 the number of such families remained fairly constant, the variations being secondary to the demands of certain types of industry. Starting in 1933 a hiegira occurred, which reached its peak in 1935 (Fig. 1). A total of 4,200 families, each averaging one child, were fed and sheltered in Cincinnati during that year.[6] No attempt was made to return these people to their homes since relief and the care of nonresidents was a Federal function. With the return of these functions to local communities in the autumn of 1935, this load dropped precipitiously because stringent residence requirements were instituted. Nevertheless, a considerable number of families continued to come to Cincinnati each year. These congregated in the lowest income group areas which produce the majority of the cases of diphtheria.[7]

A marked recrudescence of diphtheria occurred in the face of reasonably adequate diphtheria prophylaxis[8] of the city's child population. In 1938-39 the percentage of children inoculated by the Health Department and private physicians had risen to approximately 70 per cent of preschool children and 85 per cent of the age group five to nine. The relapse occurred during the period of a great influx of rural families into a community where diphtheria has been endemic for generations. The number of cases occurring among recent arrivals could not be determined, since duration of residence is not reported.

The percentage of children who had received prophylactic inoculations prior to developing diphtheria was calculated for the period 1930 through 1939 (Table V).

TABLE V

Cases of Diphtheria with a History of Prophylactic Inoculation—1930-39

Year	Per cent of total cases with history of prophylaxis	Average
1930	8.1	15.7
1931	20.6	
1932	13.0	
1933	23.6	36.5
1934	30.1	
1935	40.0	
1936	47.7	
1937	36.3	42.5
1938	44.6	
1939	42.1	

It is observed that the percentage of inoculated children who developed diphtheria rose from an average of 15.7 per cent for 1930-32 to 36.5 per cent during 1933-36 and 42.5 per cent for 1937-39.

The question of any difference between diphtheria in those who had received prophylaxis and those who had not has been discussed.[7] Since virulence tests were rarely done, a positive culture in a patient with but a "sore throat" had to be considered as evidence of clinical diphtheria. It was observed, however, that the type of case just mentioned was frequently observed in children who had had inoculations and but occasionally in those who had not.

Since the percentage of inoculated children has also gradually risen throughout the period under observation, the question arises whether the increased number of cases with a history of previous prophylaxis occurred because of or in spite of the associated increase in the number of inoculated children. Topley[9] and Seymour[10] point out that the presence or an influx of a significant number of susceptibles into a community that harbors a smouldering infection tends to cause the periodic recrudescence of the disease.

There has been no increase in the morbidity of other infectious diseases comparable to this of diphtheria. For example, the persistent high incidence of scarlet fever in the early 1930's is observed to decline in contradistinction to the rise noted for diphtheria (Fig. 1). This difference for the period 1928-39 raises a question. Was the increase in diphtheria a cyclic recrudescence? This is a definite possibility; and if true, the morbidity level was far below those of past epidemic years, perhaps because of the immunization of a considerable percentage of the city's child population. The same factor may help explain a similar experience in Detroit.[11] Of interest and importance to both health departments and the private parctitioner is the continued decline in case fatality rates of both diphtheria and scarlet fever (Fig. 1), although we have a therapeutic specific for diphtheria only (Table VI). Factors responsible for this phenomenon have been discussed by Cheeseman, Martin and Russell,[11] and Gelperin.[13]

TABLE VI

Case Fatality Rates of Diphtheria and Scarlet Fever

Year	Diphtheria	Scarlet Fever
1890 (av. 1888-1892)	24.8%	6.0%
1900 (av. 1898-1902)	15.6%	4.1%
1910 (av. 1908-1912)	9.2%	3.8%
1920 (av. 1918-1922)	7.4%	1.7%
1930 (av. 1928-1932)	5.4%	1.8%
Average 1938-1939	1.7%	0.2%

The elimination of diphtheria from any open community is a difficult problem. Primarily, one must not be deluded by falling morbidity and fatality rates, for they have been observed to decline without any appreciable diphtheria prophylaxis of a child population.[14,15] The carrier state remains a constant threat. Dudley and his coworkers[2] found that thorough prophylaxis changed the type of organism found from that of predominantly avirulent bacilli to the reverse.

With the observation that it is difficult to protect approximately 5 to 10 per cent of a population,[4,5,16] the suggestion that children receive periodic prophylaxis is worthy of consideration, especially since the technic suggested by Jensen[17] is simple and practical for both the private physician and health department.*

SUMMARY

1. A Shick survey in a semi-urban community revealed that approximately 20 per cent of a group of inoculated children remained Shick positive in spite of repeated antigenic stimulation.

2. There has been a marked rise of diphtheria morbidity in Cincinnati since 1933.

3. There has not been any similar rise in scarlet fever morbidity.

4. A marked increase in the percentage of inoculated children who developed diphtheria occurred in association with this recrudescence.

5. The case fatality rates of both diphtheria and scarlet fever have continued to decline.

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*It is desired to acknowledge the able assistance of Mrs. Grace Stoller, the Madisonville district nurse.

Diagnostic Pointers in Diseases of the Lungs

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BROOKLYN, N. Y.

Slight dyspnea on exertion and an increasing pallor and pain referable to the nipple or axillary region should suggest pleurisy.

In simple sero-fibrinous effusion there is rarely an edema of the chest wall.

In pulmonary fibrosis the affected side of the chest is immobile, retracted and shrunken; the intercostal spaces are obliterated and the ribs in extreme cases may even be seen to overlap.

The expectoration in pneumonociosis is usually mucopurulent, often profuse and in anthracosis is very dark in color.

The respiratory movements of the lung bases may be impaired or abolished in pulmonary tuberculosis.

There is a diminution in the intensity of vesicular breathing over the affected area in acute bronchitis.

The right base is the most frequent seat of pneumonic solidification.

With complete bronchial occlusion, the corresponding part of the lung collapses as a result of absorbing the retained air.

Acute edema of the lungs is found in association with the following conditions: (1) In infections, such as pneumonia; (2) In nephritis associated with uremia; (3) In heart lesions, such as endocarditis, myocarditis and angina pectoris; (4) In hypertension with arteriosclerosis; (5) In pregnancy; (6) Angeioneurotic edema; (7) As a complication of epileptic fits, and (8) After thorcocentesis.

The so-called barrel chest is very common in ephysema.

The diagnosis of intestinal emphysema is made by finding subcutaneous air.

The voice had a curious metallic echo in pneumothorax.

In diffuse early cases of bronchiectasis there is a very intense crackling quality to the breath sounds which is sometimes suggestive of dilatation.

The presence of endothelial sediment in the aspirated pleural fluid speaks for a carcinoma (endothelioma) of the pleura.

Pneumonic sputum is always tawny-yellow, fawn colored or pale straw colored.

Any lung lesion which closely resembles tuberculosis, but which on repeated sputum examinations does not yield the tubercle bacillus should be regarded as syphilis of the lungs. This is further confirmed by improvement under antileutic treatment.

When obstruction is partial and gradual the bronchi distal to the stenosis gradually become dilated.

The usual position of an empyema cavity is in the lower posterior lateral portion of the pleural cavity.

When there is a persistent irritation of the throat without local cause, examine the chest. This may be one of the earliest symptoms of mediastinal tumor or enlarged bronchial glands.

Reduced motion of the scapula during deep inspiration is a sign of tuberculosis of the lungs.

Asthma and emphysema frequently come together.

There is always a reduced motility of the diaphragm on the affected side in pulmonary tuberculosis.

Pleuritic fluid in malignant disease of the lung in the majority of cases is of the hemorrhagic type.

Hemorrhage from the lungs is usually sudden and is associated with cough.

In pulmonary infarction there is a sudden pleuritic pain, a chill, an acceleration in respiration, cough, bloody sputum and cardiac depression.

When bronchiectetic cavities are formed, the sputum becomes profuse and later purulent.

A sterile effusion is probably tuberculosis. An infected effusion may be tuberculosis.

A primary or idiopathic pleurisy with effusion, in a large proportion of the cases, is tuberculosis.

Pulmonary hemorrhage and pleurisy with effusion are always due to tuberculosis until it is proved otherwise.

Definite rales or X-ray mottling above the second rib or third dorsal spine are always due to tuberculosis.

Definite rales at the base with no signs at the apices are not due to tuberculosis unless there is a positive sputum.

A characteristic sign and often a determining factor in diagnosing mediastinal tumors, is the displacement of the trachea either to the right or left of the median line.

When pulmonary edema follows thoracic paracentesis the outlook is almost always favorable. In such cases only one lung is involved.

Sudden expectoration of large amounts of sputum or a productive cough on assuming certain positions suggests an abscess of the lungs.

Hoarseness and changes in the voice are frequently early symptoms of pulmonary tuberculosis.

There is a remarkable association of bronchiectasis with abscess of the brain.

In tracheitis the sputum is often tough and tenacious, sometimes gelatinous, in a gray, mottled, globular mass, often projected from the mouth in coughing.

Fetid expectoration occurs with bronchiectasis, gangrene, abscess or with decomposition of secretions within tuberculous cavities and in empyema which has perforated the lungs.

In interlobar empyema the physical signs are most marked in the region of the interlobar septum; there may be some displacement of the heart, and the sputum if purulent, rarely contains elastic fibers.

Hiccough is a common sign in diaphragmatic pleurisy. Pain is the most characteristic symptom. It is increased by cough or any chest movement and is referred to the shoulder or abdomen.

In bronchial asthma the breathing is costal, the diaphragm is low and the movement is much restricted. Inspiration is short, expiration much prolonged, labored and accompanied by wheezing rales.

Cyanosis of an extreme degree is more common in emphysema than in other affections with the exception of congenital heart disease.

The absence of voice vibrations in effusions of any size is a very valuable sign.

The effusion is plastic, not serous, in diaphragmatic pleurisy.

Suppressing Lactation

The male sex hormone, testosterone propionate, was employed to suppress postpartum lacation in a selected but representative group of 77 mothers.

Breast symptoms, both subjective and objective (if slight complaints are ignored), were prevented in a large percentage of patients where the administration of testosterone was begun early and was employed as a prophylactic measure. A high percentage of patients already lactating responded promptly to the application of testosterone.

Forty-eight hours postpartum was found to be the average optimum time for initiating therapy in this indication, though an occasional case would seem to demand earlier medication for effective suppression of secretion and prevention of untoward symptoms.

An average dose of 87 mg. per patient was found to have optimum milk inhibiting activity, though dosage schedules were naturally varied to meet individual requirements.

No undesirable after effects of testosterone medication were noted in any of our cases.—Alfred M. Hellman, M.D. and Leonard F. Ciner, M.D., New York City; N.Y.S. Jour. of Med., Vol. 41, No. 1, January 1, 1941.

Acute Free Perforation of the Gallbladder Following Cholecystostomy

J. J. MAREK, M.D.

THERE are three types of perforation of the gallbladder, i.e., (1) The chronic type in which the gallbladder attaches itself to some other organ and then perforates slowly into it. (2) The subacute type in which case the gallbladder is surrounded by adhesions and inflammatory tissue giving rise to an abscess and (3) The acute free perforation where the contents of the perforated gallbladder is permitted to spill freely into the peritoneal cavity.

This last type of perforation is quite uncommon. McWilliams in his own series of 3000 cases found only 29 cases of perforation of which only six were acute. Fifield reported only 27 cases of perforation out of a series of 1,066 cases. Leidberg reports a series of 319 acute cases at the Lund clinic in which only 7.270 perforated.

In discussing the perforations of the gallbladder with their associated bile peritonitis we must mention the cases of bile peritonitis caused by a slow filtration of bile through a thinned gallbladder wall. This gives many of the subjective symptoms of perforation of this organ and must be differentiated. Brendalon reports a series of six such cases.

The prognosis of these cases of acute free perforation is very grave. Review of the literature reveals an average mortality of about 50 per cent.

The causes of acute free perforation may be listed as follows:

(1) Overstretching, thus tearing away old adhesions and creating an opening.
(2) Obstruction of the cystic duct with inflammation and distension.
(3) Ulceration of the wall due to pressure from a stone.
(4) Gangrene due to obstruction of blood supply from stones, carcinoma, thrombosis, etc.

The case to be discussed is that of a 42-year-old woman who was first admitted to the hospital approximately two years ago with a chief complaint of recurrent attacks of pain in the upper abdomen. Her last attack had begun two days previous to admission and consisted of a sudden sharp pain in the right upper quadrant which radiated to the right shoulder, collapse, nausea and vomiting. This was followed by repeated attacks in the next two days interspaced by a dull aching pain in this region so that hospitalization was recommended. She had no jaundice but gave a history of selective dyspepsea. She was not able to eat fatty foods and had had several slight attacks over a period of several months preceding this. Her family and personal history revealed nothing unusual.

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Physical examination revealed a rather obese female who appeared quite comfortable. Nausea and vomiting had subsided and most of the subjective pain had gone. Palpation of the abdomen revealed considerable tenderness and rigidity over Robson's point and some tenderness in the right lower quadrant. Otherwise the abdomen was negative as was the rest of the physical examination.

Laboratory examination revealed a normal clotting time, blood count, urinalysis and icteric index. The sedimentation rate, however, was 27 mm. drop for one hour and 41 mm. for two hours being the only abnormal laboratory finding. Cholecystograms done the day after admission revealed a gallbladder which didn't fill, being suggestive of non-function.

Eight days after admission, being thoroughly prepared with glucose fluids, etc., she was taken to surgery where many stones and a purulent-like bile were removed from a thick-walled gallbladder. Following this a cholecystostomy was done. The postoperative course was uneventful so that she was discharged on the fourteenth postoperative day (5-3-38).

Her convalescence was rapid and she remained well until 1-26-40 when she began with a cramp-like pain in the upper abdomen radiating down to both lower quadrants, but especially the right. Associated with this was nausea, vomiting and constipation thus simulating a history of appendicitis. This continued for 36 hours after which she was admitted to the hospital for care. Physical examination revealed generalized tenderness with slight rebound tenderness and moderate rigidity. The tenderness and rigidity were more marked in the upper and especially the lower right quadrant.

A blood count revealed 13,050 white blood cells with 92 per cent neutrophiles and 4,960,000 red blood cells. The urine showed moderate pus and occasional red blood cells. The temperature, pulse and respiration was 100.2, 65 and 25.

With this very good picture of appendicitis somewhat complicated by gallbladder and renal symptoms, an exploratory incision was made. Immediately upon opening the peritoneal cavity much free bile was encountered. The appendix was inspected and a peri-appendicitis found thus accounting for many of the appendiceal signs and symptoms. After a hasty appendectomy, the right

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Submitted March 6, 1940.

upper quadrant was explored for a source of the bile. Here a small opening was found over the fundus of the gallbladder. There was little or no inflammation around this opening so that even though about a dozen small stones were found in the gallbladder, it would hardly seem that one of these had eroded its way through or that any other inflammatory or gangrenous processes had caused the rupture. The more probable answer is that a sudden stretch or pull caused a tearing of the old adhesions thus creating this opening. After removing the stones and aspirating the bile a cholecystostomy tube was inserted and anchored into position. The wound was closed and the patient returned to her room where she ran an uneventful postoperative course and was discharged on the thirteenth postoperative day.

Culture and smear of the bile revealed no bacteria to be present and this was borne out to be the fact that there was no postoperative peritonitis. The temperature never went above 102.6 rectally and this returned to normal in three days.

In conclusion we may summarize the following regarding this case:

(1) The picture presented here closely resembled that of an acute appendix.

(2) That the course of this perforation was due to pulling apart of the adhesions probably by overstretching or sudden increase in intra abdominal pressure, even though such a history is not available.

(3) That this rupture could have occurred with or without the presence of stones.

(4) That the bile spilled into the peritoneal cavity was sterile and thus caused only a chemical peritonitis which rapidly subsided following drainage.

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Undulant Fever (Brucellosis)

It is a fairly well accepted fact that, to make a satisfactory diagnosis, the agglutination test, skin test and opsonocytophagic test should all be carried out because it is possible only to have one of the three present. The agglutination test should be carried out first, as the skin test causes an increase of agglutins in practically all cases. It is also advisable to use a culture of B. tularensis as a control. The skin test may be carried out either by intradermal injection of Brucellergin or by use of weak dilutions of the vaccine.

The opsonocytophagic test, which is a test based upon the ability of the neutrophiles to phagocytise the Brucella Abortus, is usually done by Huddleston's technique. Huddleston and his associates have used the opsonocytophagic test to classify their undulant fever cases as susceptible to the disease, infected or immune. They classify an individual who has a negative agglutination and negative skin test with an opsonocytophagic test of zero to forty as infected. A case which has a negative agglutination positive skin test and an opsonocytophagic test of zero to forty as infected. A case which has positive agglutination, positive skin test and an opsonocytophagic test of zero to forty as infected. A case which has a negative agglutination, positive skin test and an opsonocytophagic test of sixty to one hundred as immune. A case which has a positive agglutination positive skin test and an opsonocytophagic test of sixty to one hundred as immune.

Keller, Pharris and Gaub compared the values of these tests and found that of one thousand, two hundred and forty-seven individuals tested, ninety-four and four-tenths per cent had negative agglutination and skin test; four and eight-tenths per cent had positive skin tests; one per cent had positive agglutination test; forty per cent had marked phagocytic activity; and eight and four-tenths per cent had moderate phagocytic activity and fifty-one and six-tenths per cent had no phagocytic activity. It is also interesting to note that there is no definite relation between the severity of skin reaction and opsonocytophagic activity.

Angle and Algie of Kansas City did the skin test on 7,122 children and found six hundred and forty-two, or nine per cent, of them positive. They put out a questionnaire with leading questions and found that two hundred and eight of this group had nervous symptoms, one hundred and seventy-two had headaches, one hundred and fifty-seven had rheumatic symptoms, seventy-one were constipated, and twenty-two had fever; thirty-eight and seven-tenths per cent of this group had two or more of the above symptoms. In a control group of one hundred students they found twenty-six had nervous symptoms; fifteen had headaches; six had rheumatic symptoms; two were constipated; and one had fever; of this group thirteen per cent had two or more of the above symptoms.—F. P. Fry, Jr., M.D., San Antonio, Texas; Jour. Okla. S. Med. Assn., Vol. XXXIII, No. 12, December, 1940.

Fluoroscopic roentgenography has a definite place in finding significant tuberculosis. It is relatively inexpensive and more than reasonably accurate.—Ezra Bridge, M.D., Amer. Rev. of Tuber., Aug. 1940.

Complication Following the Use of Estrogen in Spondylitis

WALTER M. SOLOMON, M.D.

THE effect of estrogenic substances on mammary tissues has recently created sufficient attention to prompt the report of its use in the treatment of a male patient with a diagnosis of spondylitis. Auchincloss and Haagensen[1] reported a case of a woman in whom they believed the prolonged and extensive use of estradiol benzoate was a probable cause for a carcinoma of the breast. That carcinoma of the breast can be produced in male mice by administering estrone benzoate was shown by Lacassagne.[2] The widespread use of the various estrogenic substances in males is perhaps not likely but that they may stimulate the male human mammary tissue was demonstrated in the following case.

Spondylitis (Marie-Strumpell's, von Bechterew's disease) is a form of arthritis involving usually the entire spine. It affects young males about eight times as frequently as females. The symptoms of pain and stiffness develop slowly and insidiously. Later the entire spine becomes rigid and eventually is completely ankylosed until the typical "poker back" results. The X-ray pictures early in the disease show no change, however, later there is haziness and obliteration of the sacro-iliac joints, and in the more advanced cases there is ossification of the ligaments about the vertebrae and of the outer borders of the intervertebral discs. The etiology is unknown. Many factors have been considered and include infection, trauma, allergy and various deficiencies. It is thought that the factors responsible for spondylitis are similar to those which cause chronic atrophic arthritis which it resembles clinically and pathologically. Recently endocrine dysfunction[3] has been suggested as a possible etiological factor.

The therapy for this type of arthritis has been very unsatisfactory. The use of vaccines, various parenteral injections, large doses of vitamins, hyperpyrexia, physical therapy and other types of therapy have all been tried with but slight effect on the course of the disease. In an attempt to find the value of the estrogenic substances four young men with spondylitis were treated. A complication occurred in one of them during its administration which is interesting and worthy of attention.

E. D., a 40-year-old male, whose symptoms of vague pains in his lower back began 20 years ago. They were never of sufficient severity to prevent work though he was never entirely free of pain and stiffness. For 10 years he consulted different physicians who prescribed various oral preparations for what was considered "rheumatism". Ten years ago he first visited the dispensary because of more severe pain and greater difficulty in walking.

The Author

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His past history included rheumatic fever at six years of age; scarlet fever and diphtheria together at 17 years of age. He never had gonorrhea. His family history was negative for cancer.

Examination at this time, 10 years ago, showed a kyphosis of the cervical and upper dorsal spine and a loss of the lumbar curve. The muscles about the lower dorsal and lumbar region were tender and moderately spastic. The pelvis was tilted forward. The motion of the entire spine was painful and markedly restricted. The motion of the shoulders was limited but not particularly painful. The hip motion, too, was impaired so that he walked with typical "waddle gait". The chest expansion was one inch. The other joints were normal in appearance and motion. The only other organ which was of interest was the heart. The left border was at the anterior axillary line. Presystolic and systolic murmurs were heard at the apex and a diastolic murmur at the aortic area. The blood pressure was 130/70.

An X-ray taken at this time showed obliteration of both sacro-iliac joints and spur formation on the fourth and fifth lumbar vertebrae. Therapy at this time was chiefly symptomatic.

Two years ago he again visited the dispensary after a lapse of eight years. His symptoms in his back were again moderately painful so that he was forced to stop work. Examination of the spine at this time showed greater kyphosis and practically no chest expansion. The motion of the shoulders and hips had not changed.

He was treated with artificial fever treatments which gave him prompt subjective relief. He also was given physical therapy in the form of infra red radiation and massage to his back. Exercises to improve his breathing and the use of flat sleeping surface were ordered. After six months of this therapy he felt sufficiently improved to return to work. Several months later he was laid off his work and was hospitalized in an effort to correct the deformity of the back. During his hospital stay traction on the neck

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Submitted September 16, 1940.

was applied with an increasing amount of weight and a Balkan frame was used with the hope of gradually increasing the extension of the cervical and dorsal spine. Intensive physical therapy was also given. There was no demonstrable change after two months trial, however, and further efforts were considered useless.

Soon after discharge from the hospital the injections of theelin was begun at weekly intervals. The initial dose was 2000 international units which was given for four weeks, then gradually increased until the dose was 8000 international units. He maintained that he had more energy, slept better and felt as if his back was less stiff. There was no change in the motion of the back or in the expansion of the chest by actual measurements. After his ninth injection, when he had received 46,000 units, both his nipples were red and swollen and extremely tender. The dose was reduced to 2000 units and continued for three additional injections. At the time of the last injection, the size of the nipples had decreased but continued to be painful and red. On a subsequent visit to the dispensary, five months after the last injection all symptoms and signs about the nipples had disappeared. The clinical results of the injections were that the patient felt subjectively better though there were no objective changes in the joints.

CONCLUSION

A male patient with spondylitis treated with an estrogenic substance developed swollen, painful nipples. Whether the continued use of the injections might have lead to malignant changes can only be conjectured. The discontinuance of the drug allowed the tissues to return to normal.

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Deficiency State and X-ray

Diseases in which nutritional deficiency plays either a primary or a secondary role are relatively common. They are associated with disturbances in the physiology and morphology of the small intestine which are demonstrable by roentgen methods of examination. These disturbances are best demonstrated by special examination of the small intestine but often appear as a by-product of a routine gastrointestinal examination for disease of the stomach or duodenum. They are recognizable not only in advanced but also in early cases. A satisfactory explanation of the mechanism of their production is not available at present.

Although a differential diagnosis cannot be made, the detection of these intestinal disturbances may serve to call attention to the presence of a deficiency state in cases in which the clinical picture is obscure.—Ross Golden, M.D., New York City; Va. Med. Monthly, Vol. 68, No. 1, January, 1941.

Clinical and Physiologic Investigation of Air Conditioning

Air conditioning based on the effective temperature scale causes both physiologic changes and definite feelings of comfort in humans. In operating and recovery rooms controlled environments are beneficial to operating room personnel and to patients in preventing excessive fatigue and drop in body temperature in the latter. Air conditioning has reduced the bacterial content of an operating room, but sterility of the air has not been obtained by these means.

A relative humidity of 65 per cent and a dry bulb temperature of from 77 to 100 F. in nurseries have reduced the physiologic weight loss of prematures in the first four days of life from 12.4 per cent of the birth weight in an ordinary nursery to 6 per cent in a conditioned nursery. The number of days required to regain the birth weight is less in a nursery where the environment is controlled, and the survival rate, therefore, is much higher.

Production of fever in either part or the whole body is facilitated in a saturated atmosphere to give safer but more prolonged treatment periods.

The exposure of persons to high temperatures for other than therapeutic purposes produces an elevation of body temperature, an increase in pulse rate, and a white blood cell increase in effective temperatures from 84 to 92 F.

A dry bulb temperature of 65 F. and 50 per cent relative humidity are the optimum conditions for an oxygen tent where the oxygen concentration is 50 per cent or more.

The allergic patient requires 75 F. dry bulb temperature and a relative humidity of 50 per cent or lower in addition to an efficient air cleaner which will remove offending particles of 15 to 20 microns or smaller.—Murray B. Ferderber, M.D., Pittsburgh, Pa.; The Pa. Med. Jour., Vol. 44, No. 3, December, 1940.

It is well to remember that during one year tuberculosis among the veterans of the World War cost the United States government more than 46 million dollars, exclusive of the cost of hospitalization. One-third of the total amount paid out for compensation to the services was for tuberculosis and 61,330 veterans were in hospitals at government expense. In this day of pensions and augmented government health services, every known scientific procedure should be used to cut down this enormous burden on the taxpayer. Tuberculosis can be detected by the use of the X-ray. The experience of twenty odd years ago need not be repeated.

Kinked Right Common Carotid Artery

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The Author

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IN reviewing several standard texts in physical diagnosis no mention is made of the kinked or buckled right common carotid artery.

The first report of the recognition of the kinking or the "reduplication of the right common carotid artery" as quoted by Parkinson, Bedferd, and Almond,[1] is by Coulson in 1852. Since then there has been scattered reports regarding pulsating tumors located in the right side of the neck. These were described as being behind, at either or both sides of the sterno-clavicular attachment of the sterno-cleido-mastoid muscle.

In 1925, Brown and Rowntree[2] reported five cases, all women, with hypertension who had marked pulsation in the right lower neck. They attributed this to a "kinking or buckling" of the right common carotid artery.

However, hypertension is not always a factor in the kinking of the artery. Parkinson, Bedferd, and Almond,[1] in a series of 40 cases, all of whom were women, found that 10 of these had no hypertension.

The mechanism in the production of the kinking is well described by the authors just mentioned. They state that there is an unfolding of the aortic arch as a result of hypertension. When arteriosclerosis of the aorta is present, lengthening of the aorta may result. One or both of these factors act in raising the aortic arch. The right common carotid is more or less fixed at its origin by the subclavian artery. Distally it is fixed by its division into the external and internal branches. Thus, raising of the aortic arch produces a looping or a kinking of the right common carotid artery, near its origin from the innominate artery. The size of the pulsating mass in the lower right part of the neck may vary considerably. In Coulson's case it is described as "the size of an orange".

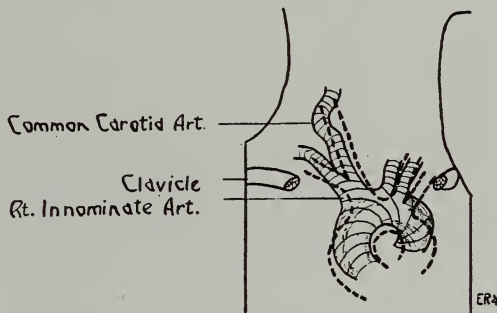
Often these pulsating tumors are confused with aneurysm of one of the large vessels at the right side of the neck, particularly of the common carotid artery. The position of the pulsatile mass and the ability to demonstrate a looping by palpating the artery from above downward, distinguishes the kinking of the common carotid artery. As for aneurysm of that artery, Parkinson, Bedferd and Almond, in their paper state that isolated aneurysm of the common carotid artery is a great rarity and that they were unable to find a single proven case.

It is interesting to note that all[1,2,4] but one reported case of kinking of the right common carotid artery has been found in females. That one exception was a negro male reported by Beardwood.[3] The great preponderance of this condition in the female is due possibly to the shorter thoracic in that sex.

CASE REPORT

A white woman, 64 years of age, has had a hypertension for several years. Her complaints were dizziness and shortness of breath in the early part of her illness. Later, she also began to complain of severe headaches and general weakness. The headaches were frontal and frontoparietal and were often so severe that she could not sleep. Ordinary analgesic drugs at times were not sufficient to relieve her. She lost 35 pounds from October 1939 to June 1940.

Physical examination revealed an elderly female with a moderate degree of kyphosis. She had a pulsating mass behind the clavicular attachment of the right sterno-mastoid muscle. The long diameter of this mass was verticle and measured approximately 2 cms. by 3 cms. The heart was moderately enlarged, the sounds were of good quality. A systolic murmur was heard at the aortic and also at the mitral area. The blood pressure varied from 190 to 240 systolic and 110 to 120 diastolic. The electrocardiogram disclosed a left axis deviation, slurring of Q R S in leads 2 and 3, and a depression of the S T interval in leads 2 and 3. The blood count was normal. Kline and Kahn tests were negative. The urine showed a plus 2 albumin, a few pus cells but no red blood cells or casts. The blood urea nitrogen was 25 mgm. per 100 cc. of blood.



The normal relationship of the arch of the aorta and the large vessels is illustrated by the dotted lines. The dynamic force of hypertension or the straightening and lengthening of an arteriosclerotic aorta will raise the arch of the aorta in relation to the clavicle. Kinking of the right common carotid artery will consequently result.

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Submitted October 21, 1940.

Anuria and Ureteral Obstruction Due to Sulfapyridine

Report of a Case*

JOHN E. WILLIAMS, M.D.

MANY reports of urinary tract complications due to sulfapyridine have appeared in the literature. These complications appear to be caused by the excretion of acetyl-sulfapyridine which is relatively insoluble. In sufficient amounts, crystals of acetyl-sulfapyridine will produce irritation and obstruction of the urinary tract. The injury is due to the physical properties of the crystals rather than to a toxic effect on the renal parenchyma. Renal calculi and ureteral obstruction have been produced in experimental animals by the administration of sulfapyridine.[1,2,3]

Five cases have been reported in which death was probably due to anuria but in which calculi were not demonstrated.[4,5,6,7] Brown and his associates[5] have reported four cases of anuria with recovery of one patient. Southworth and Cooke[8] have described two cases of impaired renal function and nitrogen retention with recovery. Long and Wood[9] have reported a case of nitrogen retention followed by death in which calculi were found in the renal pelves and ureters. Occlusion of the renal tubules by crystalline material has been described by Stryker[10] and Brown.[5]

Backhouse[11] and Tsao[12] each reported a death due to anuria; in each case the ureters were found to be obstructed by sulfapyridine calculi. No attempt was made to relieve the obstruction in these cases. Carroll,[13] Scurry[14] and Sadusk[14a] each reported the relief of anuria, due to ureteral obstruction, by ureteral catheterization. Smith[15] and Ulland[16] have each reported a case in which the anuria was relieved by bilateral renal decapsulation. However, in Smith's case bougies were passed down the ureters.

When anuria or oliguria develops in a patient receiving sulfapyridine, the possibility of ureteral or pelvic obstruction due to calculi should be considered. If this obstruction exists, it may be relieved by cystoscopic methods.

REPORT OF A CASE

The patient was a 58-year-old white female. On April 9, 1940, she was seen by a physician because of a severe bronchitis. On April 13, when signs of early bronchopneumonia were evident, she was given sulfapyridine, grams 1.5, every four hours. The drug was discontinued on April 16, after a total of about 22 grams had been given, because the patient complained of pain in the back, hematuria and obliguria. A small amount of urine was passed at 3:00 p.m. on April 16, 1940. Early in the morning of April 17 the patient was catheterized and only a few drops of bloody urine were obtained. The patient was then admitted to the Lake County Memorial Hospital at Painesville.

The Author

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Physical Examination: Temperature 38.3°C.; pulse rate 92; respirations 20; blood pressure 136/90. The patient was conscious but slightly drowsy. There were moist râles and rhonchi at the bases of both lungs. The abdomen was markedly distended. There was no peripheral edema.

Laboratory Findings: white blood cell count 19,600; red blood cell count 5,090,000; hemoglobin 90 per cent (Sahli). Blood urea nitrogen, 59 mg. per cent.

In spite of an intake of 6500 cc. of fluid, including glucose and saline given intravenously, no urine was obtained. The abdominal distention was not relieved by prostigmin and duodenal suction.

At 7:00 p.m. on April 17, 1940, I performed a cystoscopy. There was no urine in the bladder. The bladder mucosa was inflamed and edematous. Numerous small gray concretions were seen on the floor of the bladder. Both ureteral orifices were edematous and a rough gray calculus about 8 mm. in diameter was seen protruding from the orifice of the right ureter. A No. 6 F. catheter was passed up the right ureter for a distance of 30 cm., following which there was a rapid flow of about 300 cc. of concentrated urine containing a brick-red sediment. The calculus in the right ureter was pulverized when the catheter was passed. The left ureter was completely obstructed at a level of 2 cm. A large amount of calcareous material escaped from the left ureter after several attempts had been made to pass a catheter. A right retrograde pyelogram did not reveal any opaque calculi but there was incomplete filling of the lower calyces, probably due to sulfapyridine concretions.

The right ureteral catheter was left in place and irrigated every three hours with warm sterile water. A brick-red sediment was obtained from the catheter after the irrigations. During the next twelve hours 550 cc. of urine were passed through the catheter.

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*From the Urological Service, Department of Surgery of University Hospitals of Cleveland and the Western Reserve University School of Medicine.

On April 19, the blood urea nitrogen was 35 mg. per cent, and the urinary output was 1480 cc. A second cystoscopy was done. A calculus about 5 or 6 mm. in diameter was seen protruding from the orifice of the left ureter. The calculus was easily pulverized with the ureteral catheter, but an impassable obstruction in the left ureter was met at a level of 2 cm. The right ureteral catheter was replaced.

On April 20 the blood urea nitrogen was 56 mg. per cent. Intravenous pyelography demonstrated a mild right hydronephrosis but only a faint concentration of the opaque drug on the left side.

On April 23 the blood urea nitrogen was 50 mg. per cent. A third cystoscopy was done and a No. 6 F. catheter was passed 30 cm. up the left ureter. A left retrograde pyelogram revealed slight dilatation of the upper two-thirds of the ureter and of the renal pelvis.

On April 25 the blood urea nitrogen was 40 mg. per cent and 27 per cent of phenolsulphonphthalein was excreted in two hours. On April 27 the blood urea nitrogen was 27 mg. per cent. On April 29, 52 per cent of phenolsulphonphthalein was excreted in two hours.

After discharge from the hospital the patient felt quite well except for urinary frequency and urgency. On June 7, 1940, she was admitted to Lakeside Hospital. Cystoscopy revealed that the bladder was normal except for a small cystocele. Bilateral retrograde pyelograms were normal. The blood urea nitrogen was 10.5 mg. per cent. Phenolsulphonphthalein test revealed 30 per cent excretion in 15 minutes, 25 per cent in one hour and 15 per cent in two hours; total two hour excretion—70 per cent. Urine examination: specific gravity 1.010; albumin, slightest possible trace; benzidine test, negative; white blood cells, 7 to 9 per high power field.

It is unfortunate that the urine specimens were accidentally discarded before the sediment was analyzed for sulfapyridine and acetylsulfapyridine.

COMMENT

The suppression of urine appeared to be due to obstruction of both ureters by sulfapyridine concretions. The obstruction was relieved and renal function restored by ureteral catheterization. The results in this case and in three reported cases indicate that when anuria due to sulfapyridine does not respond promptly to the usual measures, an attempt should be made to relieve the obstruction by ureteral catheterization. The concretions appear to be very soft and they are easily broken. Catheterization of the ureters was probably responsible for saving the life of this patient.

CONCLUSIONS

(1) A case has been presented in which anuria and ureteral obstruction following the administration of sulfapyridine was relieved by ureteral catheterization.

(2) The urinary complications due to sulfapyridine appear to be caused by calculus formation rather than by any toxic reaction on the renal parenchyma.

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Enteropathy in Deficiency States

Emphasis has been placed upon the recognition of subclinical deficiency states, especially in so far as they manifest themselves through gastrointestinal symptoms, thus resembling mild cases of sprue and pellagra.

Evidence of a chronic enteropathy as presented above should call attention to the possible existence of a deficiency state in the same way that a neuritis may furnish a clue to the existence of a latent or incompletely evolved beriberi.—David Adlersberg, M.D. and Michael Weingarten, M.D., New York City; N.Y.S. Jour. of Med., Vol. 41, No. 1, January 1, 1941.

(I wish to thank Dr. F. J. Dineen of Painesville, Ohio, for permission to report this case.)

Therapy of Non-Diabetic Glycosuria

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The Author

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GLYCOSURIA is a fairly common finding in the routine examination of patients. The simplest and adequate classification of glycosurias, from the clinical point of view, is: (1) Non-diabetic glycosuria and (2) diabetic glycosuria. The differentiation of these two is essential and should be made promptly when a glycosuria is encountered in an individual. If such a glycosuria is due to diabetes then it requires prompt handling. If it is non-diabetic, and one must be sure that it really is non-diabetic, one should follow this up for a reasonable time in order to definitely rule out diabetes.

The question whether or not there is glycosuria in any one individual depends on one of two things: (1) Hyperglycemia above the individual's renal threshold for sugar and (2) a low renal threshold in which case no appreciable hyperglycemia is present.

There is a tremendous variation in the renal threshold in various individuals. It can lie anywhere between 50 and 386 mg. per cent of the blood sugar level. This alone presents an impossibility for the differentiation of the glycosuria from urine examination alone. One needs blood sugar studies for the solution of the problem. The easiest way to get positive information on the level of the renal threshold is from the glucose tolerance test where we can follow the rise and the fall of the blood sugar and note between what points the sugar appears and at what point it disappears. This offers an approximate level of the renal threshold. In Chart 1 we have taken two glucose tolerance tests on two individuals which show the two extremes. There you can clearly see the extent of such a variation.

TABLE 1

Relation of Renal Threshold According to Decades

Decade	Total Cases	Average Renal Threshold
1	9	106
2	40	187
3	108	139
4	201	141
5	242	155
6	157	171
7	76	148
Totals	833	Average 149

Renal threshold is not at a fixed figure. It varies in all individuals and it seems to vary in different affections. Renal threshold is an individual thing, peculiar to each individual and often varying to a certain extent even in that particular individual. This is what makes the problem of interpretation of glycosuria per se so difficult. In diabetics of long standing this threshold rises as indicated in Chart 2. Some years ago I was interested to see whether age had any effect on the renal threshold, i.e., if, as a person got older, the renal threshold rose. Thus in 1929 I[1] analyzed 833 glucose tolerance tests in the study of this relationship. The results are given in Table 1. As you see there is no definite relationship in the progressive age groups. The

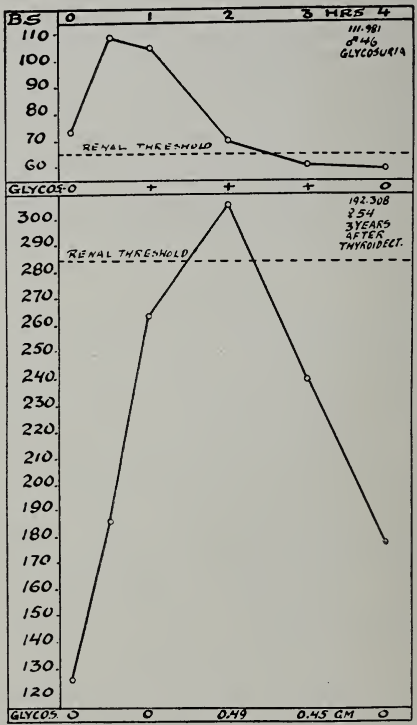

Chart 1. Variation in the Renal Threshold Presenting the Two Extremes. The curves present two glucose tolerance curves, 100 gm. glucose orally on an empty stomach.

Read before the American Therapeutic Society, New York City, June 7, 1940.

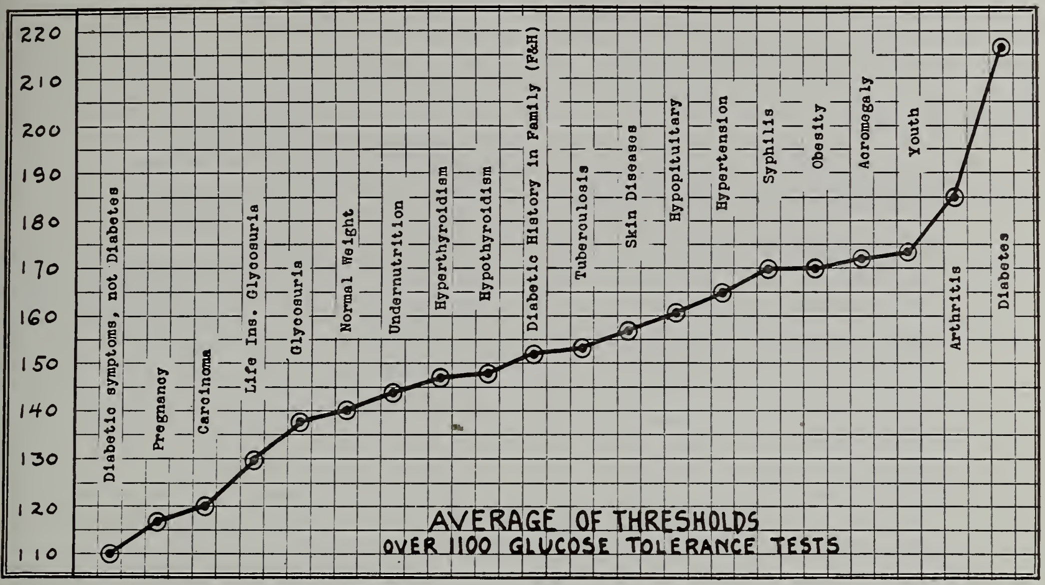

Chart 2. The Average of Renal Thresholds in 1100 Glucose Tolerance Tests arranged according to various affections.

second decade, for instance, shows the highest average level and the seventh decade drops to a level of 148. The average level of these 833 cases was 149 which is quite in contrast to the orthodox teaching that the average level of renal threshold is at 180 as given in most text-books.

What is the incidence of diabetes in the glycosuria cases as they present themselves for examination? In 337 cases of glycosuria where I[2] did a glucose tolerance test in order to determine whether or not we were dealing with diabetes, I found the following:

63 per cent showed a non-diabetic curve.
37 per cent showed a diabetic curve.

This shows the importance of settling the differential diagnosis in every case of glycosuria early. Here one word of caution: upon the finding of glycosuria do a glucose tolerance test the next day if possible, before the patient has a chance to go on a rigid diet in fear that he has diabetes. If such a test is postponed and the patient in the meantime has put himself on a rigid diet, this is apt to distort the curve and you will get a certain percentage of false diabetic curves which does not help in the differential diagnosis and in the clarification of the problem. A glucose tolerance test should be done when a patient has not been on any freak diet. If he has, then let him eat normally for a week and then do the test.

Another pertinent question one can ask: How stable, how reliable is the glucose tolerance test? Will we get the same type of a curve on repeated examinations over a period of years or will these change?

No laboratory procedure is 100 per cent perfect. In a series of repeated glucose tolerance tests over a period of years, on 127 individuals, the change in the curves are indicated in Table 2.

TABLE 2

Changes in the Glucose Tolerance Curve on Repeated Examinations

At start	Number	Cont. same per cent	Became diab. per cent	Became normal per cent
Normal	56	80.3	19.6	
Diabetic	71	70.4		29.6

There you can see that of those giving a normal curve at the beginning, almost 20 per cent, in the course of time, became diabetic; of those giving a diabetic curve at the beginning, in due course of time almost 30 per cent became normal. We can not go into a detailed discussion of these changes,[3] merely bear in mind that a glucose tolerance curve is not an unalterable, a fixed value. It is subject to changes with time, with infection, with obesity, etc.

If we give a patient 100 grams of glucose on a fasting stomach as we do in the glucose tolerance test, this places a heavy carbohydrate load on his insulogenic apparatus. Often the blood sugar rises high and as in the non-diabetic glycosuria it comes down quickly in one to two hours. One would expect varying amounts of sugar to be excreted during the four-hour period. In order to find out just what this relationship was I analyzed 1714 such curves, all of these being non-diabetic curves and the relation of the amount of sugar excreted. Table 3 presents these data. As you see almost 60 per cent of these normal curves were sugarless in the urine. In almost 40 per cent of the amount of sugar excreted was from a trace to 5 grams. Only in 0.4 per cent did it exceed 5 grams, varying from 5.1 to 6.1 grams. This shows that while there is glycosuria the actual amount of sugar lost is infinitesimal. Then when we go a step further and analyze in this manner the normal glucose tolerance tests where the test was done because glycosuria was found, we find an interesting point: here, although they did show glycosuria before the test, in 25 per cent I found no glycosuria during the test and 75 per cent showed a trace to less than 5 grams excretion, none above this point.

TABLE 3

Glucose Tolerance Tests Presenting Normal Curve and the Amount of Sugar Excreted During the Four Hours. 1714 Cases

No sugar excreted	Per cent	Trace to 5 grams	Per cent	5.1—10 grams	Per cent
1024	59.7	682	39.7	8	0.4
174 Glucose Tolerance Tests done because of Glycosuria					
45	25.8	129	74.2	0	0

Consequently when we look upon this problem of non-diabetic glycosuria from a practical, common sense view, it is clear that it can not play any important part in the carbohydrate metabolism of the individual as far as body economy is concerned. What of it if such a person loses in 24 hours from a trace to 5 grams of sugar? He takes in 300 to 400 grams of carbohydrate in his food per day and consequently such a trifling loss is negligible. On the other hand, cases of non-diabetic glycosuria reported in the world literature shown in Table 4, do show a considerable amount of sugar excreted in the 24-hour period. Thus there can be marked variation in this group. I am inclined to feel, however, that large amounts of sugar excreted are the exception rather than the rule.

Is non-diabetic glycosuria a permanent condition or does it change later into diabetes?

This problem can be answered in a definite manner only if adequate laboratory evidence is furnished for the original diagnosis. Many statements occur in the literature that such a glycosuria is a precursor of diabetes, that it is merely a transitory stage. I feel that most of these statements are based on insufficient evidence in the beginning of investigation and consequently that what was considered a non-diabetic glycosuria was really diabetic glycosuria and thus no transitory stage really occurred as years went on. The person was a diabetic in the beginning.

There is sufficient evidence in the literature[4] to support the statement that a non-diabetic glycosuria remains so throughout the years. Table 4 presents my own observations and data which I gathered from the literature. It is clear that these observations have extended over a long enough period of years to give them weight. Consequently one can feel at rest that a non-diabetic glycosuria is not a transitory stage toward diabetes.

As the cases presented in Table 4 indicate, a definite group of non-diabetic glycosuria cases, observed over a long period of years, continuing to show sugar, yet remaining non-diabetic. Their daily excretion of sugar continues apparently with some variation. It is due to a low renal threshold which lets sugar through at a low blood sugar level. We can not change this level of renal threshold as it is a fixed anatomico-physiological condition. There is nothing we can do about it therapeutically. The amount of sugar excretion, for the most part, is so small that it does not play any important part in the body economy. Even where it is larger in amount, we can not change it. It is there, it will remain thus. The most important part, I think, is to be sure that we are actually dealing with a non-diabetic glycosuria at the beginning and next, not to release a close supervision of these cases for a period of several years so that we can be sure of our original diagnosis. As far as actual therapy is concerned, there is none.

TABLE 4

Summary of Observation of Various Authors on Non-diabeic Glycosuria

Author	Age of pt. at beginning of treat., yrs.	Sex	Period of observation yrs.	Daily output of sugar grams
Allan, Wm.	17	F	18	16-49
Bailey, C. V.	—	F	11	20
Faber, K., Noorgard, A.	26	F	3	60-80
Garrod, A. E.	12	M	9	
Goldbloom, A.	1.5	M	----	1%
Holst, J. E.	24	M	23	
	7	M	22	1%
John, H. J.	32	M	21	
	30	M	25	
	16	M	19	
	46	M	24	
	44	M	16	
	34	M	20	
	17	F	21	
	2.5	M	19	
Johnson, A.	28	F	16	
	—	F	16	
	25	M	10	
	—	M	10	
Lemann, I. I.	19	M	1	trace
	0.3	M	3	trace
	15	M	6	trace
Lewis, D. S.	—	—	5	25
	—	—	5	16
Labbé, M.	6	F	11	1.2-0.03%
	6	—	19	
Marsh, P. L.	22	F	1.3	50-60
	—	—	1.25	15-122
	74	M	—	30-50
Parkes, W. T.	—	F	35	30

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References, omitted because of lack of space will appear in reprint.

Otitis Media in Scarlet Fever

A Survey of Cases at Cleveland City Hospital for the Past Ten Years

CLARENCE W. ENGLER, M.D.

DURING the ten-year period from January 1, 1930, to January 1, 1940, 8,229 cases of scarlet fever were admitted to the Division of Contagious Diseases, City Hospital, Cleveland. Of these, 798, or 9.7 per cent, were complicated by otitis media. This percentage compares favorably with the figures reported from other contagious disease hospitals, the incidence of otitis media in scarlet fever varying from 3.75 per cent to 25 per cent with an average of from 10 to 12 per cent.

Of the 8,229 patients, 4,028, or 49 per cent, were males, and 4,201, or 51 per cent, were females. Otitis media occurred in 444 males, 55.6 per cent, and in 354 females, 44.4 per cent. These figures show that although scarlet fever occurred in 2 per cent more females than males, the incidence of the complication of otitis media was greater in the male sex by 11.2 per cent (Table 1).

TABLE I

Sex Variation

	No. Cases Male	% Male	No. Cases Female	% Female
Total No. Cases of Scarlet Fever 8229	4028	49.0	4201	51.0
Total No. Cases of Otitis Media 798	444	55.6	354	44.4

In this series, scarlet fever was most prevalent from December to June, there being a marked decrease in the number of cases during the summer and fall months. The incidence of scarlet fever otitis media was fairly constant during the winter and spring months. During most of the summer and fall months, there was a considerable decrease in the number of otitis media cases. Graph 1 delineates the curves of the number of scarlet fever cases and the percentage of otitis media for each month.

In some years, the morbidity of scarlet fever was greater than in others. For example, in the year 1933, there were 1,316 cases at City Hospital, while in 1935, there were only 443. This yearly variation depends on the severity and virulence of the epidemic. It is strange that such a high incidence of otitis media should occur in 1937, 1938 and 1939, the percentages being 11.8, 9.4 and 13, respectively (Graph 2). It is interesting to note that in 1939, although there were 682 cases of scarlet fever, 13 per cent of which were complicated by otitis media, there was only one death.

The Author

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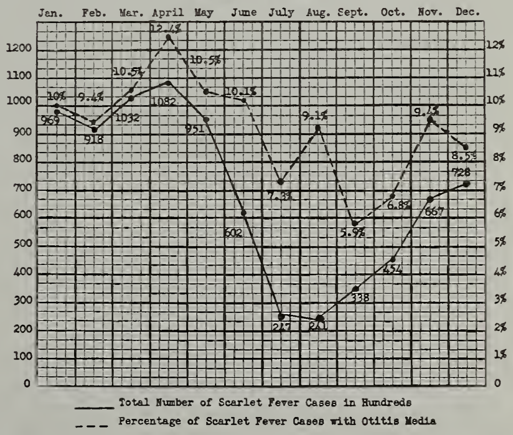
Scarlet fever occurred most frequently between the ages of 3 and 10, 56.8 per cent of the total admissions falling in this group. Otitis media, as a complication, was present most often between the ages of 1 and 8. Seventy-six and four-tenths per cent of all the otitis media cases occurred in this group. There were 92 deaths in this age period, accounting for 56.8 per cent of the total mortality. In the group under one year of age, both the incidence of otitis media and the

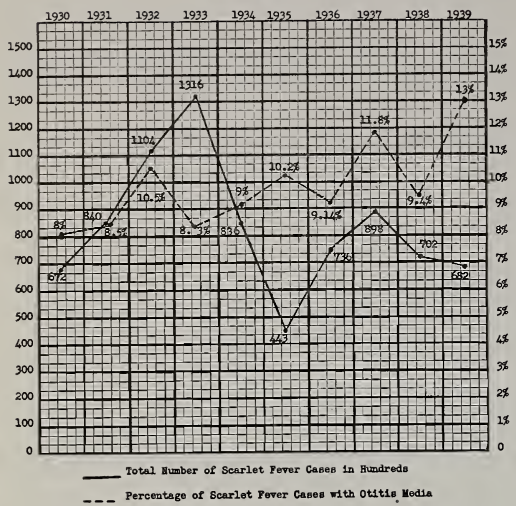
GRAPH I

SEASONAL VARIATION



Read before the Section on Eye, Ear, Nose and Throat, Ohio State Medical Association, at the Ninety-Fourth Annual Meeting, Cincinnati, May 14-16, 1940.

GRAPH II
YEARLY VARIATION



mortality rate are lower than those given in most reports (Table 2).

TABLE II

Age Incidence of Scarlet Fever, Otitis Media and Mortality

Age Groups	No. Admissions	% Total No. Admissions	No. Cases Otitis Media	% Total Cases Otitis Media	No. Deaths	% Deaths
0-1	59	0.6	18	2.25	4	2.45
1-2	181	2.2	59	7.6	10	6.2
2-3	356	4.3	107	13.5	14	8.6
3-4	578	7.0	101	12.7	19	11.6
4-5	608	7.4	90	11.3	12	7.4
5-6	733	8.9	81	10.2	14	8.6
6-7	829	10.0	96	12.1	11	7.0
7-8	745	9.0	71	9.0	12	7.4
8-9	651	8.0	38	4.8	6	3.7
9-10	538	6.5	39	4.9	7	4.3
10-15	1580	19.0	67	8.4	15	9.2
15-20	435	5.3	10	1.3	4	2.45
20-30	624	7.6	16	2.0	15	9.2
30-40	230	2.8	5	0.63	14	8.6
40-50	61		0		6	3.7
50-60	14		0		0	
60-	3		0		0	

In the 798 cases which developed otitis media, 1223 ears suppurated. By far the greatest number of ears, 556, were involved during the first week of scarlet fever. About half as many, 294, suppurated during the second week, and one fourth as many, 139, the third week. In other words, 81 per cent of the otitis media cases occurred in the first three weeks of scarlet fever, with 45.5 per cent developing in the first week (Table 3). Infection of the middle ear may take place any time during the course of the scarlet fever. Borden, as quoted by Williams, remarks, "Aural complications of any degree of severity may arise at any time from the first day of the acute symptoms to the last day of the convalescence."

TABLE III

Week in Scarlet Fever in Which Otitis Media Developed*

Week	No. of Ears	% of Ears
1st	556	45.5
2nd	294	24.0
3rd	139	11.4
4th	125	10.2
5th	45	3.7
6th	30	2.5
7th	22	1.8
8th	4	0.3
9th	2	
10th	2	
11th	2	

*In two ears, the week of the onset of the otitis media was not stated.

The statistics gathered in some reports would indicate that early paracentesis of the bulging ear drum is of no great value as compared with spontaneous rupture in lessening the development of mastoiditis. Other authors feel that early paracentesis not only relieves pain and reduces the pressure behind the bulging ear drum, but also lowers the incidence of mastoiditis. In this series, approximately 55 per cent of the draining ears ruptured spontaneously. However, 67 per cent of the mastoiditis cases were in this group. Forty-two per cent of the infected ears were incised, but only 29 per cent of the mastoiditis cases occurred in this group. From these figures it is apparent that early paracentesis has a distinct value over spontaneous rupture in lowering the incidence of mastoiditis (Table 4).

Paracentesis is also of value following spontaneous rupture of the drum in those cases in which there is inadequate drainage. Three per cent of the draining ears and 4 per cent of the mastoid infections fell in this classification.

Occasionally, it is necessary to reincise the drum, but repeated myringotomies are not necessary. As Williams points out, the bulging membrane that invites repeated incisions is often due to the swollen mucosa of the middle ear and not to localized pus.

It has not been my experience that otitis media in scarlet fever causes a marked destruction of the ear drum in a few days or even a few weeks, as has been described in some of the textbooks on otology. Most of the cases, even those with mastoid involvement, had intact drums on recovery. The cases with large perforations represent, according to Gardiner, Gowen, Peabody, Williams and others, either previous ear involvement, neglect in care, prolonged drainage, or perhaps too long deferred surgical intervention on the mastoid.

TABLE IV

Comparative Occurrence of Mastoiditis Following
(1) Spontaneous Rupture and
(2) Paracentesis of the Ear Drum

	No. Ears	% Otitis Media	No. Mastoids Involved	% No. Mastoids Involved
Spontaneous Rupture	674	55.1	130	66.7
Paracentesis	514	42.0	56	28.7
Paracentesis after Spontaneous Rupture	35	2.9	9	4.6
Total	1223		195	

TABLE V

Week of the Otitis Media in Which Mastoiditis Developed*

Week	No. Mastoids Involved	% of No. Mastoids Involved
1st	30	15.0
2nd	50	25.7
3rd	44	22.6
4th	41	22.6
5th	6	3.0
6th	8	4.1
7th	3	1.5
8th	6	3.0
9th	0	0
10th	3	1.5
11th	2	1.0
12th	1	0.5

*In one case (one mastoid), the week was not stated.

The majority of the cases reported here had pain during the development of the otitis media, particularly those that occurred in the first few weeks of the disease. Some of the cases had spontaneous rupture of the drum without pain. This was especially true late in the disease. In the progress notes the house officer sometimes records that he was amazed or chagrined to find one of the ears draining, although there had been no complaint of earache.

Seventy-one and two-tenths per cent of the mastoiditis cases developed during the second, third and fourth weeks of the otorrhea (Table 5). There were 154 cases of mastoiditis involving 195 ears, 113 being unilateral and 41 bilateral. Mastoiditis occurred in 19.3 per cent of all cases of scarlet fever otitis media, and in 1.9 per cent of all cases of scarlet fever (Table 6). Three cases had revision of the mastoid for the removal of sequestrae and to clear up the discharge.

TABLE VI

Percentage of Mastoiditis in Total Scarlet Fever Admissions and in Scarlet Fever Otitis Media

<table>
<tr><th>No. Cases Otitis Media</th><th>Total No. Cases Scarlet Fever</th><th colspan="2">No. Cases Scarlet Fever Mastoiditis</th><th>% Mastoiditis in Scarlet Fever Otitis Media</th><th>% Mastoiditis in Total No. Scarlet Fever Cases</th></tr>
<tr><td>798</td><td>8229</td><td colspan="2">154</td><td>19.3</td><td>1.9</td></tr>
<tr><td></td><td></td><td>Unilateral</td><td>Bilateral</td><td></td><td></td></tr>
<tr><td></td><td></td><td>113</td><td>41</td><td></td><td></td></tr>
</table>

Two types of involvement were seen in the mastoiditis cases. In one type, the mastoid was markedly inflamed with very little pus present; in the other, the mastoid was completely broken down and filled with pus.

It is well to open the mastoid as soon as the diagnosis of mastoiditis has been made in order to prevent a chronically discharging ear, to save the hearing and to shorten the hospital stay. It has been stated that 15 per cent of all chronically discharging ears are due to scarlet fever. No set rule can be made that will apply to the time when the mastoid should be operated. It would seem wise to investigate the mastoid in any case of scarlet fever otitis media which has drained more than four weeks, even though such signs and symptoms as pain, tenderness, redness and swelling be absent.

In the last three years of this series, 122 cases of otitis media in scarlet fever were treated with sulfanilamide or one of its derivatives. Seventeen of these cases, or 14 per cent, developed mastoiditis. In the 676 cases of otitis media not treated with a chemotherapeutic drug, mastoid infection manifested itself in 137 cases, or 20.2 per cent. It is evident then that chemotherapy is of value in preventing the development of mastoid infection in scarlet fever otitis media (Table 7).

TABLE VII

Value of Sulfanilamide

No. Cases Otitis Media	No. Cases Mastoiditis	% Mastoiditis
Not treated with sulfanilamide: 676	137	20.2
Treated with sulfanilamide: 122	17	14.0

The percentage of mastoiditis was not much greater in the scarlet fever otitis media cases complicated by other contagious diseases than in those not complicated. There were 105 cases of otitis media in which there were cross infections. Of these, 22 cases or 21.5 per cent developed mastoiditis. As stated before, operative interference was necessary in 154 cases of mastoiditis, or 19.3 per cent of the total number of otitis media cases (Table 8).

TABLE VIII

Scarlet Fever Otitis Media Complicated by Other Exanthemata

Disease	No. Cases	Mastoiditis		% Developed Mastoiditis
		Unilateral	Bilateral	
Rubeola	46	8	3	24.0
Varicella	36	4	2	17.0
Diphtheria	7	1	0	14.3
Parotitis	5	0	0	0
Pertussis	4	0	1	25.0
Rubella	2	1	0	25.0
Rubeola and Varicella	4	0	1	25.0
Rubeola and Pertussis	1	0	1	100.0
Total	105	14	8	21.5

Of the total number of scarlet fever cases (8,229), 163 patients died. This gives a general mortality rate of 2 per cent. In 7,431 cases without otitis media, 130 or 1.75 per cent died. In 644 cases with otitis media but without mastoiditis, 24 or 3.7 per cent died. In 154 cases with otitis media and mastoiditis, 9 or 5.8 per cent died (Table 9).

In the otitis media cases of this series, there were four with lateral sinus thrombosis in which the jugular vein was ligated. Three of these patients recovered and one died. One case with a temporal lobe abscess died. There were nine cases of streptococcic meningitis, four of which also had streptococcic septicemia; seven patients died and two recovered; mastoiditis developed in five, four of whom died. There were 20 cases of streptococcic septicemia, including the four which also had streptococcic meningitis; 18 patients died and two recovered; mastoiditis developed in eight, seven of whom died (Table 10). In considering the nine deaths in these mastoiditis cases, one must remember that four of them were listed under both streptococcic meningitis and streptococcic septicemia.

TABLE IX

Mortality Rate

No. of Cases	No. Recovered	% Recovered	No. Deaths	% That Died	% Total No. Deaths
Total No. Cases Scarlet Fever 8229	8066	98.0	163	2.0	100.0
Without Otitis Media 7431	7301	98.25	130	1.75	79.8
With Otitis Media, but without Mastoiditis 644	620	96.3	24	3.7	14.7
With Otitis Media and Mastoiditis 154	145	94.2	9	5.8	5.5

In the treatment of scarlet fever otitis media it was found, in this survey, that the use of sulfanilamide or one of its derivatives lessened the incidence of mastoid infections. The newer, more refined and concentrated type of antitoxin now being used in the treatment of scarlet fever causes the temperature to fall rapidly and decreases the severity of the disease. Because of these effects, the complication rate of otitis media should be reduced.

TABLE X

Complications

Complication	No. Cases	No. Recovered	Deaths
Lateral Sinus Thrombosis (Ligation of Jugular Vein)	4	3	1
Brain Abscess	1	0	1
Streptococcic Meningitis (4 cases had streptococcic septicemia) (5 mastoidectomies—4 deaths)	9	2	7
Streptococcic Septicemia (4 cases had streptococcic meningitis) (8 mastoidectomies—7 deaths)	20	2	18

With early paracentesis of the involved ear drums, fewer mastoid infections result than after spontaneous rupture. In the otitis media cases, boric acid irrigations were used to keep the ear free of discharge. Light treatments were employed in some instances. An involved mastoid should be operated early to prevent chronicity and to avoid impairment of the hearing.

It would seem that throat irrigations and nasal douches, particularly in the early days of the disease, would tend to carry the infection by way of the Eustachian tube to the middle ear and thereby increase the number of cases of otitis media. The use of drops to shrink the swollen nasal mucosa followed by gentle suction will keep the nose free of excessive secretions.

No reliable statement can be made regarding the effect of the removal of the tonsils and adenoids, or adenoids alone, on the otitis media cases in scarlet fever, inasmuch as this procedure was carried out in only 47 cases of this report. Many authors urge their removal in the third week of the otorrhea, or even earlier, asserting that the aural discharge clears up in a few weeks afterward.

SUMMARY

From this survey of 8,229 cases of scarlet fever, occurring during a period of 10 years, 798 or 9.7 per cent of which developed otitis media, the following summarization may be made.

1. Although scarlet fever was present in 2 per cent more females than males, otitis media as a complication occurred in 11.2 per cent more males than females.

2. Scarlet fever was most prevalent from December to June. The scarlet fever otitis media curve paralleled fairly well that of scarlet fever.

3. There are yearly variations in the morbidity of scarlet fever, dependent on the severity and virulence of the epidemic.

4. Scarlet fever occurred most frequently between the ages of 3 and 10. The incidence of otitis media and the mortality rate were highest between the ages of 1 and 8.

5. Eighty-one per cent of the otitis media cases developed during the first three weeks of scarlet fever, 45.5 per cent occurring in the first week of the disease.

6. Paracentesis has a definite value over spontaneous rupture of the ear drum in lessening the incidence of mastoid involvement. Fifty-five per cent of the involved ears rupturing spontaneously accounted for 67 per cent of the mastoidectomies. Forty-two per cent of the infected ears were incised, but only 29 per cent of the mastoid infections were in this group.

7. Mastoiditis developed most often during the second, third and fourth weeks of the otorrhea.

8. One hundred and fifty-four cases of mastoiditis developed in 195 mastoids, 113 being unilateral and 41 bilateral. Mastoid infection occurred in 1.9 per cent of the total number of scarlet fever cases and in 19.3 per cent of the total number of scarlet fever otitis media cases.

9. Sulfanilamide, or one of its derivatives, is of value in the prevention of mastoiditis in scarlet fever otitis media. Fourteen per cent of the cases treated with it and 20.2 per cent of the cases in which it was not used developed mastoiditis.

10. When scarlet fever otitis media was complicated by other contagious diseases, the incidence of mastoiditis was not increased to the high percentage reported by others.

11. The mortality rate in all the 8,229 scarlet fever cases was 2 per cent. In those cases with otitis media, but without mastoiditis, it was 3.7 per cent; while in those complicated by mastoiditis, it was 5.8 per cent.

12. Four cases of lateral sinus thrombosis, one brain abscess, nine cases of streptococcic meningitis and 20 cases of streptoccoccic septicemia complicated the otitis media cases of this series.

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The rapid decline in tuberculosis mortality rates has been due mainly to lessening in the incidence of infection. Among those infected, the toll though diminished, is still appalling. Mortality statistics, morbidity reports, autopsy examinations, tuberculin tests and X-ray surveys, indicate that about half of all infected individuals develop clinical tuberculosis, and that from 10 to 20 per cent of them eventually die of the disease. The high risk of disease and death due to infection by the tubercle bacillus justifies increased efforts for its prevention.—Emil Bogen, M.D., Amer. Rev. of Tuber., August, 1940.

If people knew how hard I have had to work to gain my mastery, it wouldn't seem wonderful at all.—Michelangelo.

"An Ounce of Prevention"

B. BERNARD CAPLAN, M.D.

IN any discussion concerning psychiatry and its manifestations, one is confronted by the inescapable fact—that the mental hospital population is greater than ever before. We are aware that at least a portion of this increase is due to earlier and better recognition of mental disorders. Therefore, our combined efforts should be directed particularly toward the preventive aspect. As further reason for this statement, the following statistics should again be brought to the attention of the medical profession.

1. There are in this country about 750 public and private institutions devoted to the care of the mentally ill, defectives and epileptics. These hospitals receive considerably over 100,000 patients each year—not including over 25,000 readmissions (50 per cent of them under 40 years of age). It is a fact worthy of contemplation that 25 per cent of all annual admissions to psychiatric institutions have been hospitalized from one to five times previously.
2. The hospital census for mental cases in the United States equals the combined total of all other hospital beds.
3. Regardless of our lassitude in facing the true situation, the stern facts of reality are that practically 50 per cent of the annual admissions to our mental institutions will become permanent residents in our tremendously over-crowded hospitals.

Finally, more important is the fact that one out of every twenty children born today will eventually, upon reaching maturity, enter a hospital for the mentally ill.

Is an increased hospital building program the answer, or do we need an "eye-opening" mental hygiene program that will be comparable to the recent venereal disease campaign? At a recent general practitioners' post-graduate course in one of our large cities, there was an enrollment of approximately 70 physicians. All lectures save one were well attended and that one—as you may have guessed, was pertaining to psychiatry. Instead of the original 70, only 10 were in attendance. The lecturer, a noted authority on his subject, commented on this apparent lack of interest. In the discussion that followed, one physician made the remark that as psychiatry is presented today, there is too much play on words and too much fine writing so that it soon becomes abstract and unintelligible. What we need is a presentation of psychiatry in a simple, easily understood, concrete language. Why is it more important to listen to the pregnant woman's symptoms with rapt, attentive face, than to a puzzled human, nervous and tortured by a seemingly ever-present mental conflict?

The Author

● Dr. Caplan, Toledo, Ohio, is a graduate of University of Toronto, Faculty of Medicine, 1936; member of staff, Toledo State Hospital.

Appreciating the fact that the public believes psychiatry to be a relatively new science, it is interesting to recount a few very common misconceptions that have been expressed by the parents, relatives and friends of patients concerning the study of psychoses.

1. Belief that psychiatric aid is expensive and only for the wealthy.
2. Belief that the patient would be used as an experiment in trying new theories.
3. Belief that new methods are painful—perhaps from recollections of movies or tales of brutal treatment, straight-jackets and bread and water diets as punishments.
4. Unwillingness to acknowledge that there is need of mental treatment, since this would make people talk and would prove to the neighbors that Mary or John was mentally ill.
5. False conception that these conditions are temporary and people "grow out of them."
6. Belief that the patient would be operated upon since most mental ills are due to brain tumors or growths, resulting in a case of life or death. All of the profession engaged in psychiatric work have been asked at one time or another if an X-ray had been taken of the patient's skull and a tumor found.
7. Fear that the patient would never again be accepted by society and would, in the case of a young person, prevent matrimony or securing work.

Following are a few suggestions that might aid in erasing erroneous impressions from the minds of the public.

1. Publishing articles regarding psychiatric treatment and methods in magazines read not only by the medical profession but millions of lay people—such as Liberty, Saturday Evening Post, Life, Readers Digest. These articles should be written in an unbiased manner to counteract the impressions and fears created in recently published sensational articles, referring specifically to the articles entitled "The Living Death", published in the Cosmopolitan Magazine. The public, reading this article, is left with a feeling of horror and righteous indignation at the supposedly brutal and inhuman treatment patients are receiving in state mental hospitals.

Read at the 55th Semi-Annual meeting of the Association of Assistant Physicians of the Ohio State Hospitals held at Columbus State Hospital, Columbus, Ohio, April 4-5, 1940.

The author is indebted to Dr. O. O. Fordyce, Superintendent of Toledo State Hospital, for his helpful advice and criticism.

2. "Open House" should be held occasionally in our mental institutions to facilitate inspection by teachers, home and school club officers, Boy Scout and Girl Guide leaders, Junior League workers, Settlement House workers, Librarians, Government Officials from Relief and W.P.A. agencies. Inasmuch as the above group contact children, young people and their families, they should be enlightened as to the early signs and symptoms of mental disorders so they might, in turn, advise those approaching the danger point to aid them in getting the proper medical attention early, before a "full-blown" mental disorder has developed.

3. Each mental hospital should have staff members who are capable of lecturing to all the above-mentioned groups on mental hygiene, showing movies, presenting statistics and discussing modern methods of therapy for mental disorders.

4. Psychiatric examination would be useful for every applicant for relief since many such individuals, in despair, and in a discouraged state due to unemployment become potential mental cases. In preventing one such individual from becoming a state hospital case, we not only save the state approximately two hundred dollars a year for his care, but of more importance, prevent undue suffering and anguish, both for relatives and patients.

5. Medical lectures on the radio often tend to discourage the layman from listening—the terms used at times being beyond his comprehension. A regular scheduled program of dramatized cases could be presented weekly, centering attention not so much on tales concerning narcotic addicts, alcoholics and those with criminal tendencies, but on the recognition of the common symptoms of mental disorders. Advice concerning methods of prevention should also be given. An illustration of the good that might be derived through this medium was presented on Tuesday evening, October 17, 1939, on the "We The People" program. One of the dramatized cases was that of an individual who had been insane and had recovered. He pointed out that being insane did not ostracize him from society and further that being mentally ill was no worse than being physically sick. What is more important, he stressed the necessity of early treatment.

6. Those in psychiatric work are all acutely aware of the fact that the relatively new insulin and metrazol therapies for certain types of mental disorder have their greatest value where the duration of the psychosis is at a minimum. Therefore, it is imperative that the general public and medical profession as a group be aware of the necessity of recognizing early symptoms and understanding that the sooner proper therapy is instituted, the better the prognosis. We have only to note the success of the recent venereal disease campaign stressing the importance of early treatment to realize that if a similar conscientious effort is made, as far as mental health is concerned, we will have done considerable to reduce the morbidity of mental illness.

7. To further such a program, we propose a meeting of socially prominent, philanthropic, civic, religious and educational leaders with the local medical group in each community, to inaugurate a Mental Health Week.

8. The establishment of mental hygiene clinics throughout the State would be of unlimited value. To date, a start has been made in this respect, but as yet the present clinics are woefully undermanned and unpublicized. Such agencies could provide guidance for the convalescing mental patients, instruct their families as to the proper care and prevention of factors which might lead to their recurrence or relapse of the former condition.

9. Finally, we propose "wider use" of the voluntary commitment law to state mental hospitals. If we are to prevent mental illness, we must open and pave the way so that those individuals who realize they need psychiatric aid do not have to carry the embarrassment and stigma brought on by court commitment.

In making the above suggestions, we are fully cognizant of the need for the expenditure of much more money by the State and other agencies for the care of the mentally ill. However, if psychiatry is to advance and is to take its rightful place as one of the most important phases of modern medicine, the veil of ignorance must be torn aside and not only the general public and the medical profession as a whole, but Government officials as well must be informed and educated on this vital subject so that important preventive measures and early therapeutic methods can be adopted when necessary.

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Vitamins Not All

While scientific research has given convincing evidence of the importance of the vitamins in human nutrition, it has just as conclusively shown the need for various mineral elements, particularly calcium, phosphorus, iron and copper, for protein of a high biologic value and for sufficient calories to meet the varying activity tant factor in nutrition since there is an intimate needs of the body. No one food is the all impor- relationship among all the essential factors; carbohydrates and fats have a "sparing" influence on protein metabolism; without a balanced and adequate supply of calcium and phosphorus vitamin D is of no avail; calcium and phosphorus work together to give rigidity to skeletal and dental tissues; without traces of copper, iron is not adequately used; without calcium vitamin A will not support growth and vice versa; without some protein from animal sources the essential amino acids will not be available for growth and functioning of body cells; vitamin B_1 or thiamin bears a close relationship to the oxidation of carbohydrate foods, so the one whose activities are greater requires more of this vitamin.—Elizabeth C. Nickerson, B.S., C.P.H., Hartford, Conn.; The Conn. S. Med. Jour., Vol. 5, No. 1, January, 1941.

The statistician deals with averages; the physician with individuals.—Fetterman.

Lymphocytic Chorio-Meningitis With Isolaton of the Virus

JOHN E. BROWN, JR., M.D.

CASE REPORT

BARBARA R., a 13-year-old white schoolgirl of American parentage, was admitted to the Isolation Unit of University Hospital on May 24, 1938, with chief complaint of severe frontal headache of two days duration.

Her family history was non-contributory and her general health had always been good. In earlier childhood she had had chicken-pox, whooping cough, measles, and mumps with uneventful recoveries. She had been successfully vaccinated about five weeks previously with a normal "take" and no severe local or systemic reaction. About once each month for over a year, she had been having attacks of vomiting, often associated with headache, which had been attributed to "delayed menstruation". There had been no recent exposure to any obvious contagion, and no history suggestive of tuberculosis or tuberculosis contact.

Two days before admission, she began complaining of a severe frontal headache, which had persisted almost continuously, occasionally accompanied by pain behind the right ear. There were three episodes of definitely projectile vomiting. Malaise and moderate temperature soon appeared. After 48 hours, the attending physician, Dr. H. L. Donohoe, and the E. N. T. consultant, Dr. Russel Means, could discover no evidence of ear or sinus infection, but did observe moderate stiffness of the neck. The patient was thereupon sent to the Isolation Hospital with presumptive diagnosis of meningitis.

On admission, we noted a well developed and nourished girl who appeared moderately ill, but did not look particularly toxic or meningeal. She complained continuously of severe pain in the frontal area, aggravated by motion or bright light. She was rational and cooperative. Complete physical and neurological examination revealed only the following significant findings: Fundi and eye and pupillary motions normal. Nose and sinuses appeared negative, but there was a definite low-grade pharyngitis; tonsils were small and cryptic. Neck was moderately resistant to anterior flexion, and there were slight Kernigs present. There was a well defined tâche cérèbrale. Knee jerks and ankle jerks could not be elicited.

A lumbar puncture was accordingly carried out, and a ground glass fluid was obtained under increased pressure. Eight hundred cells were counted, with 80 per cent lymphocytes and 20 per cent polys in the differential. Globulin was positive with protein 150 mg.; sugar was present, 52 mg. Chlorides were 643 mg. Gram stains and Ziehl-Neelsen stain for tubercle bacilli were negative, and no pellicle formed. Cultures on ordinary media were negative. Colloidal gold curve was 5 — 1's and 5 — 0's, and Wassermann was negative. Subsequent lumbar puncture next day showed almost a purulent appearing fluid with 1640 cells, but all lymphocytes. Chemical findings, smears, and cultures were essentially the same as on the initial tap.

The Author

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The height of the temperature was 103.8 degrees shortly after admission with a fluctuating drop to normal by the sixth day. There was only a slight elevation in the pulse and respiration. Blood pressure was 106/88. Two white counts were reported as 7,800 and 8,750 respectively with 74 and 75 per cent polys. Hemoglobin, red count, two urinalyses, and a P. P. D. No. 1 were not remarkable. Chest plate was negative, and an X-ray of the right wrist showed no evidence of lead line.

With a purulent meningitis eliminated, and a tuberculous process unlikely, we felt we were dealing with some form of "lymphocytic" or "benign" meningitis, less probably an atypical encephalitis or polio-encephalitis—the month being May and no other poliomyelitis being reported. The patient was accordingly treated symtomatically and expectantly. Sulfanilamide, 60 grains, with an equal amount of soda bicarbonate, was prescribed daily, because of early optimistic reports in the literature concerning virus infections in experimental animals. Ice cap, dim lights, pyramidon 10 grains, and later pantopon 1/3 grain, were ordered for the almost intractable headache of the first few days. Phenobarbital and soluble sodium luminal, grains two or three subcutaneously, were necessary for marked restlessness.

By the sixth day her temperature, pulse and respiration were essentially normal and her symptoms, except for slight occasional frontal headache, had disappeared. Physical examination was now completely negative. On the seventh day, lumbar puncture revealed a normal pressure and only 60 cells, all lymphocytes.

She was discharged home on the tenth day, and her subsequent course, according to the attending physician, Dr. Donohoe, has been completely uneventful—with no residual.

Through the courtesy of Drs. N. P. Hudson and O. C. Woolpert of the Department of Bacteriology of Ohio State University, extensive studies were run on a sample of spinal fluid obtained on the third day of hospitalization. Six mice were inoculated intra-cerebrally with 0.03 cc. each of spinal fluid. Four of the six mice presented essentially the same picture by the eighth day: tremors, rough coat, irritability, retraction of the legs on stimulation, and death within 24 hours. From the brain of one of these, subinocu-

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Read before the Section on Pediatrics, Ohio State Medical Association, at the Ninety-Fourth Annual Meeting, Cincinnati, May 14-16, 1940.

From the Isolation Unit, University Hospital, Columbus, Ohio, and the Department of Pediatrics, Ohio State University College of Medicine.

lations were given to other mice, and nine successive serial passages of the infectious agent were made, with essentially the same clinical picture in the experimental animals. This infectious agent was shown to be free of demonstrable bacteria, and was filtrable through Berkefeld V candles.

Further studies, by Dr. Charles Armstrong of the National Institute of Health and by Drs. Hudson and Woolpert, demonstrated that our strain gave positive cross-immunity tests with two known strains of the virus of lymphocytic chorio-mengitis.

THE LITERATURE

The first reference to this disease dates back probably to Arvid Wallgren[1] in 1925. The author described three children, aged five, seven, and nine years, who had a clinical and laboratory picture simulating almost exactly our own case. He gave a description of the syndrome that is still classic, and called it "a new infectious disease of the central nervous system," although he could not locate the offending virus. Wallgren was the first to suggest that these occasional cases, with high lymphocytic spinal fluids and favorable outcome, constituted a new disease—and not atypical tuberculous meningitis, polio, or epidemic encephalitis. Viets and Watts[2] in 1929 followed with complete case reports of five adults showing the same general clinical picture that has been described. The disease was presented as a new syndrome to which they gave the name of "aseptic lymphocytic meningitis". The only animal inoculations carried out were in guinea pigs for tuberculosis.

In 1934, Armstrong and Lillie[3] published a description of a newly discovered virus which they encountered while doing experimental studies in animals on the encephalitis virus from the 1933 St. Louis epidemic. This virus, the exact origin of which they were not certain, was entirely different from the encephalitic organism, and caused a characteristic picture in monkeys and mice. In monkeys, they describe "a more or less diffuse and irregular cellular infiltration of the meninges", with "the exudate composed chiefly of small lymphocytes". In two-thirds of their animals, "more or less pronounced swelling, oedema, and lymphocytic infiltration of the chorioid plexi were noted." This laboratory syndrome they called "experimental lymphocytic chorio-meningitis of monkeys and mice," and surmised that their virus might be of human origin.

One year later, in 1935, Armstrong and Dickens[4] described four human cases which showed the typical clinical and laboratory picture, and found that their cases were caused by a virus that was identical in reaction to that described by Armstrong the year before. So it was, therefore, only five years ago that the first human cases of lymphocytic chorio-meningitis, proved by transmission through experimental animals, were described.

In the past five years, there have been several reports of isolated individual cases or of very small epidemics which have been called lymphocytic chorio-meningitis if the virus has been isolated; or aseptic lymphocytic meningitis if animal experimentation was unsuccessful or was not carried out. In all probability, in these instances we are dealing with the lymphocytic chorio-meningitis of Armstrong and Lillie, or at least with a disease caused by a virus very similar to that isolated by them. From the scientific point of view, it is unfortunate that the disease practically always ends in complete recovery in the human, so that we must depend on animal experiments to prove our diagnosis. Machella, Weinberger, and Lippincott,[5] however, describe one typical case with death on the 29th day of the disease. Autopsy showed an intense inflammatory reaction of the meninges, ventricular walls, and chorioid plexus, with the remainder of the brain essentially normal. Death was ascribed to increased intracranial pressure, as a result of inflammatory obliteration of the subarachnoid fluid spaces. Unfortunately, no attempts were made to identify the virus.

DISCUSSION

Lymphocytic chorio-meningitis may, therefore, be described as an acute, usually benign and self-limited disease, affecting the central nervous system, characterized by severe headache, stiff neck, fever, and a very high lymphocytic cell count in the cerebrospinal fluid. The offending virus may be isolated by injection of the spinal fluid into mice or monkeys. From Armstrong and Lillie's[3] work with experimental animals and from the rare autopsy reports in human cases, we know that the pathological picture is principally one of extreme lymphocytic engorgement of the meninges and the chorioid plexi—hence the name.

Occasional small epidemics of the disease have occurred, or only an occasional endemic case may be discovered. Most of the cases described in the literature have appeared during the summer months. Incubation period is thought to be between seven and fourteen days.

The onset is always acute with severe headache, fever, and meningeal symptoms, such as stiff neck, Kernigs, and Brudzinskis. Chills, projectile vomiting, and delirium are often present—although characteristically the sensorium is clear with the patient complaining almost continuously of severe intractable headache. Convulsions are extremely rare as compared to other meningeal diseases. Fundi are usually normal, although papilledema has been described in several cases.

The white blood count is usually normal or moderately increased, 8 to 12,000 being the rule. The spinal fluid is usually under markedly increased pressure with counts that vary between 50 and 2,000, 80 to 100 per cent of the cells being lymphocytes. Globulin and protein are somewhat increased, but sugar and chlorides are within normal limits. Routine cultures and stains are, of course, negative, as is guinea pig inoculation for tuberculosis. Gold sol seldom goes higher than 1 or 2 in the first or mid-portion of the curve. Diagnosis is established by transmission of the disease to experimental animals, as has been already described. Symptoms persist for several days to several weeks, the average duration being about 14 days. Severe headache persists often throughout the active period, and is, in our experience and that of other authors, quite difficult to treat.

Therapy is largely symptomatic and expectant. Spinal punctures are indicated for relief of symptoms of intracranial pressure, and large doses of sedative may be necessary to control headache.

Recovery is complete with no sequelae in the form of palsies, paralysis, or mental deterioration.

370 E. Town St.

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Symptoms of Arachnidism

In order to describe accurately the symptoms of arachnidism, Blair allowed an adult female black widow spider to bite him for ten seconds on one of his fingers. He noticed a bluish pinpoint mark at the site of the bite and divided the course into three stages.

First Stage: Lymphatic absorption, with a throbbing hot pain in the bitten finer; the pain extending upward to the metacarpus within 12 minutes after the bite. Within 15 minutes there was a dull aching pain in the axilla, the whole arm had a dull, aching, slightly numb feeling, followed by an aching pain over the left side of the chest; then pains over the precordium.

Second Stage: Vascular Dissemination—There was a dull, drowsy, lethargic feeling, aching epigastric pains, a flushed headachy feeling with aching in the neck muscles and a feeling of malaise.

At this stage the observations were taken over by an associate who reported that severe pains were present over the whole abdomen, which was tense. There was a trembly feeling in the legs. Two hours later there was severe aching in the lumbar region, abdomen and chest; speech was difficult and jerky, respirations rapid and labored, the abdomen was rigid; the heart sounds slow, regular and normal in character; the pulse weak and thready, rate 60. Agonizing lumbar pains followed. The patient stated that it was torture to lie still on his back while the electrocardiograms, which were normal, were being made. He was placed in a hot bath, which gave some relief.

Third Stage: Elimination—Three hours later he felt better and was given morphine, one-fourth grain. Vomiting now occurred.

Pain of various kinds persisted in varying degrees for a period of eight days, following which his health has remained excellent.

Local Reactions: The injury caused by the bite usually soon disappears but may be followed by a secondary infection. Sloughing does not occur.—F. C. Hodges, M.D., Huntington; W. Va. Med. Jour., Vol. 36, No. 12, December, 1940.

Surgery in Treatment of Ulcers

Conservative medical therapy usually controls the symptoms of ulcer promptly and results in healing of the lesion. Medical management is disappointing as a measure to prevent recurrences of the disease in cases seen in the hospital, even if carried out over a long period of time. Surgical therapy should be considered if the risk of operation appears to be outweighed by the prospect of frequent and severe recurrences under continued conservative treatment or if symptoms persist after an adequate trial of medical treatment.

The chief indications for elective surgery are persistent pain under hospital treatment, oft recurrent gross hemorrhages, pyloric obstruction which fails to respond to medical treatment and suspected malignancy in cases of gastric ulcer. Posterior gastroenterostomy yields excellent results in cases of duodenal ulcer with persistent pyloric obstruction, but is not indicated in other types of duodenal ulcer or in gastric ulcer. Subtotal gastrectomy results in a complete and apparently a permanent freedom from symptoms in both gastric and duodenal ulcer in a high percentage of cases regardless of whether the indication for operation is persistent pain, recurrent hemorrhage, or obstruction.—Charles A. Flood, M.D., New York City; Jour. Ind. S. Med. Assn., Vol. 34, No. 1, January, 1941.

Chronic Friedlander's Bacillus Infection in the Lungs

A Case Record Presenting Clinical Problems

JAMES M. RUEGSEGGER, M.D., AND PEARL M. ZEEK, M.D.*

A 47-year-old white man was admitted to the Cincinnati General Hospital July 18, 1940, complaining of expectoration of large amounts of foul-smelling, purulent and frequently blood-tinged sputum. The precise history of previous events could never be reliably established. Two or three years before, he had an illness characterized by right lower chest pain and the production of bloody sputum. He was ill for six weeks but recovered rather rapidly after an episode which he described as the "breaking of an abscess" following which he expectorated much foul, brown material. Subsequently, he had an unusually long convalescence each time he contracted an upper respiratory infection. It was difficult to estimate the extent to which he was incapacitated for he was an itinerant peddler; he had lost about 30 pounds of weight in the two to three year period. During the three weeks immediately preceding his admission he had been a patient at a hospital for transients in this city.

Physical examination showed a well-developed but poorly nourished man having a paroxysmal cough which was productive of large amounts of purulent, frothy sputum. Significant findings were poor oral and dental hygiene and marked clubbing of the digits of all extremities; the right side of the chest showed diminished excursion, decreased tactile fremitus, and dullness in the lower portion; the breath sounds over this area were absent in places, amphoric in others; numerous sticky and bubbling rales were present.

Laboratory Data: Examination of the blood disclosed a slight leucocytosis with some shift to the left. Sputum examination revealed a mixed flora of many type XIII and a few type III pneumococci. Tubercle bacilli were not found. Dark-field examination was not done. Roentgenoscopic examination of the chest confirmed the clinical impression of lung abscess in the right middle lobe.

Course in the Hospital: The patient was afebrile on admission and fever was never a prominent symptom; for periods of two to three days he had an irregular fever up to 101° but each time it subsided without specific therapy. The pulse rate remained around 110 even with absolute rest in bed. Treatment consisted of postural drainage and a high-caloric and high-vitamin diet. Bronchoscopic examination confirmed the site of the abscess but did not disclose any foreign body or neoplasm. The patient felt so much improved following bronchoscopy with aspiration that this procedure was repeated at weekly intervals as a therapeutic measure. He seemed to be improving until eight weeks after admission when he began to complain of pain over the left chest on breathing, and the sputum again became bloody. He had very little fever but signs of consolidation appeared in the mid portion of the left chest. He failed rapidly and died two days after onset of involvement of the left lung. Examination of the sputum at this time revealed many Friedlander bacilli (Type A); blood culture was negative.

Discussion: Here is a fairly classical story of pulmonary suppuration. Physical examination as well as the X-ray left no doubt that the lung showed excavation. The chronicity of the process is confirmed by the chronic pulmonary osteoarthropathy as well as by the dense reaction in the lung surrounding the abscess.

The etiology of pulmonary suppurative processes is not well understood and this case is no exception. The finding of types III and XIII pneumococci in the sputum was probably fortuitous, for both of these organisms are frequently found as harmless inhabitants of the respiratory tract. In this instance, the easy identification of the pneumococci may have been unfortunate for this finding probably discouraged the search for other organisms. The Friedlander bacillus caused the terminal pneumonia in the left lung, but clinically the role of this bacillus in causing the established lesions in the right lung is not clear.

From the standpoint of treatment the patient represents the type who does poorly on "medical treatment". Expectant therapy of lung abscesses usually effects no benefit after the second or third month if improvement has not occurred before. This patient was in no condition for surgical interference. A course of sulfonamide therapy might have prevented the final episode but success with these drugs in pulmonary suppuration has not been notable.

The necropsy was performed by Dr. Daniel Oscherwitz. The pathological diagnoses were: chronic and acute Friedlander's bacillus (Type A) infection of the lungs (confluent lobular pneumonia, acute and chronic abscesses); chronic and acute bilateral obliterative pleuritis; chronic hypertrophic pulmonary osteoarthropathy of the terminal phalanges.

The right lung weighed 785 grams. It was firmly bound to the chest wall by dense fibrous adhesions. There was a large, well walled-off abscess, 6 cm. in diameter, occupying the anterior inferior portion of the right middle lobe. The rest of this lobe, and also the entire right upper lobe, were moist, dark purple and crepitant. The right lower lobe was atelectatic and fibrotic. Microscopically, numerous foci of active chronic pneumonitis with focal necrosis were found in this lobe. In microscopic sections from the wall of the middle lobe abscess stubby, Gram negative, encapsulated bacilli were the only organisms found (Hematoxylin-eosin, Giemsa, acid fast and Gram stains).

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*The authors represent respectively the Medical and Pathological Services of Cincinnati General Hospital.

This is the first of a series of cases to be published under the heading "Case Record Presenting Clinical Problems," selected by Dr. R. S. Austin, Professor of Pathology, University of Cincinnati College of Medicine.

The left lung weighed 1350 grams and was bound lightly to the chest wall by easily broken fibrinous adhesions. The upper lobe was completely consolidated. Section revealed confluent lobular pneumonia with many areas of beginning abscess formation. Microscopic sections from this lobe confirmed the gross diagnosis; in addition numerous bacilli of the type described above were seen. A pure culture of Friedlander's bacillus (Type A) was obtained from this lobe. The compressed left lower lobe showed congestion, edema and focal atelectasis.

This case represents a chronic suppurative process of the lung with an acute terminal pneumonia, all caused by Friedlander's bacillus (Type A). The duration of the process was two years or longer, probably with several minor acute exacerbations before the terminal one. Friedlander's bacillus infection is often considered an acute fulminating process with a high mortality. However, this organism may cause chronic pulmonary suppuration which is often difficult to differentiate from pulmonary tuberculosis. It should be considered in cases of chronic pulmonary disease with cavitation in which the bacillus of tuberculosis cannot be found.

Focal Infection

When the chapter on focal infection is finally written, we shall find that we have been overcredulous in regard to this concept in the etiology of many chronic diseases. I refer particularly to the question of foci of infection as a cause of essential hypertension. There is no evidence that there is any real relationship between them, and this is just as true in regard to treatment. The removal of so-called foci of infection will not cure essential hypertension. This does not mean that foci of infection should not be removed from hypertensive or prehypertensive people, but only for the same purpose that they are removed in other people.

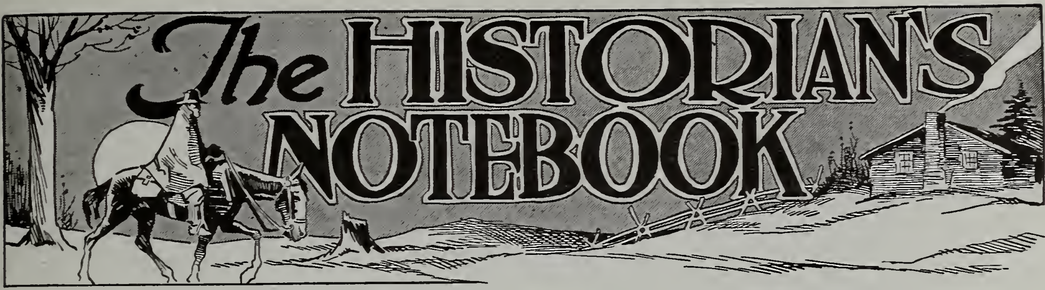
Tobacco seems definitely to be a vasospastic agent in some persons and had better be denied to hypertensives and candidates for hypertension.

The last consideration for discussion is the question of psychic factors in relationship to essential hypertension. When all is said and done, essential hypertension seems to be the result of the reaction of a predisposed individual to his environment. Therefore, it seems reasonable to study this individual in relationship to his environment rather than to throw up our hands hopelessly because of his predisposition. This calls for physical and mental hygiene in its best sense. Mental hygiene does not mean, as is so often the case, that the physician asks the patient, "Are you worried about anything?", and is satisfied with a negative reply. This, by the way, is the same physician who will say to the hypertensive patient, "Stop worrying" or "Go home and take it easy". The one approach is just about as ineffective as the other. There is only one method that has any merit, and that is to encourage the patient to talk about himself as a person rather than as a medical case. This must be done by skillfully guiding conversation rather than by asking direct questions. This will often succeed in bringing psychologic conflicts into the open. One caution for the physician is in order. It is much safer to listen than to talk. Heedlessly giving advice on important emotional factors carries with it many dangers.—Edward Weiss, M.D., Philadelphia; Med. Annals of District of Columbia, Vol. IX, No. 12, December, 1940.

The Adrenals

The use of a synthetic product, desoxycorticosterone acetate, alleged to represent the adrenal cortical hormone, in treating Addison's disease was highly praised in recent literature. However, it has proven to lack the efficacy of potent adrenal cortex preparations, as well as effecting highly undesirable toxic manifestations. My own experience with this substance confirms these findings. While it appeared to be capable of prolonging life in some adrenalectomized animals it also exerted toxic effects. In Addison's disease it failed to produce any beneficial influence but rather led to decline in the general condition, which was promptly corrected by administration of potent adrenal extract. Among those cases in which beneficial results were reported, it is observed that adrenal extract or salt or both, were administered in addition to the synthetic product —and they were reported much too soon for proper evaluation of the final results.

The routine clinical use of this synthetic product as a prophylactic against surgical shock, on the basis of a few inconclusive experiments on a small number of rats, seems almost incredible. It may be asked, why would a surgeon undertake to perform an operation if he presupposes that he is going to induce shock?—J. M. Rogoff, M.D., Pittsburgh, Pa.; Jour. of Med., Cincinnati; Vol. 21, No. 10, December, 1940.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

The Rise of Dermatology in Cincinnati

ELMORE B. TAUBER, M.D.

The Author

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DR. WILLIAM THOMAS CORLETT has written of medicine in Ohio before the white man. The Indians never dreamed, however, that on the Ohio River a great medical school would be built.

Cincinnati, on the Ohio, is justly proud of its close relationship to American dermatology. It was in this city that Noah Worcester practiced. He was the man who wrote the first textbook on dermatology in America. This book was published in 1845, nine years after the other "dermatological first in America", Bulkley's Dispensary for Skin Diseases, in New York. Worcester practiced medicine, dermatology, and held the chair of Physical Diagnosis and Pathology at the Medical College of Ohio in Cincinnati before he went to Cleveland. It was in Cincinnati, too, that this great man died, in 1847.

There is very little known of the status of dermatology at this particular period in Cincinnati other than a brief note of the first medical convention of Ohio in Columbus on June 4, 1821. This convention adopted a list of recommended textbooks for the examination of candidates. The following works on dermatology and syphilology were included:

Bell and Hunter on the Venereal Diseases.
Willin and Bateman on Cutaneous Diseases.

During this long interval of what Pollitzer has called the "shabby treatment of dermatology", diseases of the skin were treated by everybody, especially the practitioner of surgery. From the old case records of the Commercial Hospital in Cincinnati, the forerunner of the Cincinnati General Hospital, one sees the great number of skin and venereal diseases which were admitted to the surgical service.

In the record books of the old Commercial Hospital, we find the following records:

"March 10, 1837 . . . . There is not a single record in the medical department nor a single instrument in good repair. Most of the cases of instruments have lost one or more important pieces.

(Signed) JOHN SHOTWELL.

"March 10 . . . . Had syphilis July 4, 1836. Has nodes at present with acute pains and tenderness on middle anterior part of each tibia, slight sore throat.
Rx. . . calomel
pulv. antimoniae et opii aa gr. xx make 20 pills. Take one three times per day."

"May 14 . . . . Admitted with measles. The eruption was profuse and tuberculous, that some doubt existed whether it was not pox. Has recovered without any special treatment."

In the record book of the old Commercial Hospital for the male service in 1860, it is curious to read that Dr. George C. Blackman, the noted Professor of Surgery at the Medical College of Ohio, diagnosed a case on the surgical ward "a combination of lichen and psoriasis palmaris." The number of venereal diseases admitted to the service was far greater than the number of diseases of the skin. From then on, there are frequent reports of skin and syphilis cases, but the number of venereal ones overshadowed the skin cases.

Cincinnati became conscious of dermatology again on May 8, 1888. At this time, occurred the first meeting of the Section on Dermatology and Syphilology of the American Medical Association. L. Duncan Bulkley was the chairman and F. Dunlap was the secretary. The host of the section was our own Cincinnati dermatologist, August Ravogli. This section was not only the newest, but also the smallest. At this time, L. Duncan Bulkley was elected chairman and W. T. Corlett was elected secretary. There was some agitation also in Cincinnati to change the name of this section, which was called "Section of Dermatology and Syphilography" to the Section of Dermatology and Genito-Urinary Diseases." The following interesting papers were read:

W. T. Corlett—A Clinical Study of the So-called Prairie Itch, Lumberman's Itch, Etc., with Consideration as to its Entity.

George T. Elliott—Tuberculosis Cutis Verrucosa.

L. D. Bulkley—Syphilis as a Non-Venereal Disease.

B. M. Ricketts—The Use of Arsenic in Dermatology.

Frank Woodbury (who was a professor of Therapeutics and Materia Medica)—Brief note of two cases of Primary Exfoliativa Dermatitis (Pityriasis Rubra).

To remind us very much of the present day meetings, in more ways than one, there was a symposium on the etiology and treatment of eczema. Those who took part in this were Bulkley, Zeisler, Schoemaker, Ravogli, Reynolds, Ricketts, Fleishner. Papers also were reported to have been read by Ohmann-Dumesnil and Palmer.

The dermatologists of this particular period in Cincinnati, in addition to the well-known Ravogli, were A. G. Drury, who was formerly professor of Hygiene at the Medical College of Ohio, and later became professor of Dermatology in the Laura Memorial Medical School of Cincinnati and dermatologist of the Presbyterian Hospital; C. E. Caldwell, excellent anatomist and surgeon; E. H. Shields, professor of Dermatology and Genito-Urinary Surgery at the Miami Medical College, and Benjamin Merrill Ricketts, who had served one year as interne at the New York Skin and Cancer Hospital about 1885. On December 1, 1901, the distinguished dermatologist, M. L. Heidingsfeld, was elected dermatologist of the Jewish Hospital.

In the early part of the twentieth century, dermatology began to develop slightly. The Ohio Medical College affiliated itself with the University of Cincinnati, and all the medical lectures were given in the old McMicken Institute with a one-story clinic building on McMicken Street, and all hospital work and clinic lectures and cases being presented in the old Cincinnati General Hospital on Twelfth Street. The skin clinics were held every Monday and Thursday afternoons from 3:00 to 5:00 P.M. There were no attendants, no nurses. The only person in the clinic other than the clinicians was a janitor who opened the building, turned on the heat and lights, and sat at a desk and checked the clinicians and patients.

The Skin Clinic head was Dr. August Ravogli, the next in charge was Dr. M. L. Heidingsfeld, and Dr. E. B. Tauber was the associate. Dr. Ravogli would deliver a clinical lecture on cases that were there, and Dr. Heidingsfeld and Dr. Tauber would treat the cases, and keep such records as were possible to keep in a book, but there were no cards, and no duplicate copies of any sort. Dr. Ravogli delivered a didactic lecture once a week on Saturday morning at the Medical Building of the University of Cincinnati, and clinical lectures were also delivered at the old Cincinnati Hospital by Dr. Charles Seth Evans and Dr. August Ravogli, mostly on syphilis and venereal diseases.

This was the setup at that time, and gradually from the early nineteen hundreds to nineteen fourteen some improvement had taken place in the keeping of records also in the microscopic and blood work and some histopathology.

The new Cincinnati General Hospital was then built and was ready for occupancy in 1915 with a dermatological service in the hospital which was distributed in various wards. This was staffed by Dr. August Ravogli, Dr. Heidingsfeld, and Dr. Tauber, and a part-time interne was given to us, but the skin and venereal clinics continued to function in their former downtown location until 1917. This was in accordance with the opinion of Dr. Christian Holmes and other prominent clinicians that downtown clinics best serve the indigent Cincinnati public. By 1917, however, it had become quite evident that the dispensary could not advantageously be divorced from the hospital, and the clinics were established in the new suburban hospital.

An important function of the attending dermatologists was the diagnosis and treatment of venereal disease among the numerous prostitutes and other police cases brought to the hospital. This service attained such proportions that for a number of years there was a separate "prostitute ward" in the hospital.

The American Dermatological Association held its annual meeting in Cincinnati in May of 1917. Dr. August Ravogli was President of the American Dermatological Association at that time. The meeting was well attended, but there was some distraction as members had just received their call to colors and under the circumstances, the general membership did not feel quite as scientific as usual, but were rather socially inclined.

This was the second large scientific dermatological group entertained here in Cincinnati; since then the Mississippi Valley and Central States Dermatological Societies combined have had two meetings four years apart, the last one being held in November, 1935, at the Cincinnati Hospital when more than 200 doctors were present. This meeting was both a scientific and social success.

Having long felt the desire of having a dermatological society in Cincinnati, an informal meeting was arranged by Dr. H. Jerry Lavender with the assistance of Dr. Elmore B. Tauber. This meeting was held in the Staff Room of the Cincinnati General Hospital, on October 7, 1925.

Those present at this temporary meeting were the following physicians: A. Ravogli, E. B. Tauber, R. R. DuCasse, K. G. Zwick, G. H. Holt, C. J. Broeman, A. W. Nelson, H. L. Claassen, and H. J. Lavender.

Doctors C. T. Pearce and James W. Miller, although not present, expressed in communication their willingness to cooperate. It was the unanimous opinion that the Cincinnati Dermatological Society be organized, and the following temporary officers were elected to function until the first regular business meeting: President, Dr. A. Ravogli; Vice-President, Dr. E. B. Tauber; Secretary and Treasurer, Dr. H. J. Lavender.

In order to expedite matters, a committee composed of Doctors Tauber, Broeman, and Zwick was selected to formulate by-laws and to seek information in regard to the management, rules and regulations of similar societies in other cities. The by-laws would be discussed and acted upon at the first regular meeting, this meeting to be called at the discretion of the above-named committee.

The first regular meeting of the Cincinnati Dermatological Society was held at the Cincinnati General Hospital on Wednesday, November 4, 1925, and the organization was completed, with the object that of the promotion of the scientific study of dermatological and venereal diseases.

Two years later, Cincinnati joined with similar societies of Pittsburgh, Cleveland, and Detroit, to form the "Four Cities Dermatological Association" (now the enlarged Central States Association) and only a few months later joined the Mississippi Valley Dermatological Association.

In the space of 14 years since its inception, our present roster of the Cincinnati Dermatological Society composed only of men trained and equipped in dermatology, has grown from 11 to 32 members.

Persistent efforts yielded an important milestone in Cincinnati dermatology in 1930, when a separate dermatological ward of 30 beds was obtained. This was augmenteed by an additional 10 to 12 beds on the pediatric ward. Progress from this time has been rapid and marked. A part-time dermatological resident was installed, and regular interne service was provided. For the first time the all-important matter of records was approached when a system of permanent though incomplete, records of house cases, photographs, and biopsies was begun.

Nineteen hundred and thirty-two saw the humble inception of the X-ray clinic under the direction of Dr. H. L. Claassen. Equipment used in this clinic is the property of the X-ray department and, in consequence, treatments were given in conjunction with this department, although selection of cases and actual operation of the apparatus was performed by the resident dermatological staff.

In 1933, the first full-time dermatological resident was appointed, and in 1935 there were two residents. In this year also, affiliation and control of the Quarantine Hospital of the Workhouse was obtained.

During the past several years, the dermatological service has widened its scope and has expanded in all directions. The average daily ward census is now 30 patients with an average of 1.5 admission daily. Many cases are hospitalized for study and research, and in this the department is fortunately able to enlist the cooperation of the various basic science laboratories of the Medical School as well as the various clinical divisions of the hospital proper. There is an active dermatological consultation service participated in by the resident and attending staff. A full-time secretary is employed, and a complete system of records of house and clinic cases, interesting cases, X-ray therapy, biopsies, and photographs is religiously kept. Additional equipment and laboratory facilities are constantly being provided. The rapid growth of the clinic service is reflected in the following figures:

Year	Clinic	New Patients	Total Visits
1928	Skin	454	940
	Venereal	1,476	14,510
1929	Skin	462	978
	Venereal	1,245	14,933
1932	Skin	994	3,410
	Venereal	1,236	19,427
1935	Skin	1,149	3,957
	Venereal	997	25,511
1936	Skin	993	3,166
	Venereal	955	25,208
1937	Skin	1,062	3,495
	Venereal	870	21,498
1938	Skin	1,507	5,418
	Venereal	1,195	27,000

In the teaching of dermatology, too, many changes have been made. Third-year students receive, in addition to their course of didactic lectures, instruction and demonstration in the clinics. Fourth-year students enjoy the privilege of ward work and bedside teaching in small groups, and receive practical lectures from the attending staff. Instruction of nurses in dermatology follows along similar lines. The varied aspects of syphilis are taught to medical students and nurses in the Night Clinic and in the Quarantine Hospital of the Workhouse. Post-graduate education embraces a full-time dermatological staff of three physicians who rotate through the various services including the Workhouse. They receive instruction and careful supervision from the attending staff and some practical aspects of dermatological practice in seminars held in the downtown offices of members of the dermatological staff. The resident staff attends and actively participates in the meetings of the Cincinnati Dermatological Society. The varied activity and varied research projects in the General Hospital, Department of Dermatology, are remarkable in that there are no endowments.

Although continued progress has been made, ideals in facilities, clinical work, research, and teaching, are yet to be obtained, and it is to this end that our immediate and future efforts will be directed.

A large endowment will be a necessary desideratum so that we can have full-time attending dermatologists and a larger laboratory equipment and facilities for research work, but with the spirit evidenced by our group, I am sure it will only be a short time before all of this will come to pass.

Data for this paper was compiled by the following:

Dr. Alfred Freidlander: Former Dean of the College of Medicine, University of Cincinnati.

Dr. H. J. Lavender: Attending Dermatologist Cincinnati General Hospital.

Dr. Leon Goldman: Assistant Attending Dermatologist Cincinnati General Hospital.

Dr. Alfred Weiner: Former Senior Resident Cincinnati General Hospital.

Dr. Elmore B. Tauber: Director of Service, Cincinnati General Hospital.

In addition to the above names, there were many others who have given us information and data from time to time.

The Committee on Medical History and Archives of the Ohio State Archaelogical and Historical Society will welcome anything relating to the practice of medicine, including dentistry, pharmacy, nursing and like activities, books, reprints, transactions, instruments, prescriptions, account books, saddle bags, instrument cases, diplomas, letters, diaries, genealogies and photographs.

Contributions should be sent to Jonathan Forman, M.D., chairman of the Committee, care of the Ohio State Archaeological and Historical Society, Museum, Ohio State University Campus, North High St., Columbus, Ohio. Such contributions will be properly and permanently preserved in the Museum of the Society.

Annual Meeting of Committee on Medical History

The Section on Medical History and Archives of the Ohio State Archaelogical and Historical Society will hold its annual meeting at the Museum, High Street and Fifteenth Ave., Columbus, Ohio, on Friday, April 4. The program will continue with the period from 1835 to 1858.

The Delamater Medical Association

Norwalk once had a Medical Association which bore the name of "The Delamater Medical Association". It was organized in 1858 by a number of well-known physicians of Erie and Huron Counties, among whom were Doctors C. Smith of Lyme, Doctors Galpin and Dean of Milan, Doctors Cook and Lane of Monroeville, Doctors Read and Ford of Norwalk and others about the county. The object was for mutual improvement and the meetings were held quarterly, nearly always in Norwalk.

In the early days of its existence the meetings were held at the residences of the members and at each meeting some member was required to report a case in his practice that was unusual, or write a paper pertaining to the profession. At one time the membership attained over 50 names and the average attendance was always around 25. The organization became one of the well-known medical associations of the state and on many occasions medical men were in attendance from all over the state and the meetings were reported in the national medical journals. The organization existed for many years, even up to a comparatively recent period and there is a possibility that it may yet be in existence, although it is many years since I have heard of any meetings. In the old days a meeting of the Delamater Medical Association was an event in Norwalk. The late Dr. Dudley P. Allen, prominent Cleveland surgeon, was at one time a president of the Association.—J. H. Williams, Curator Firelands Museum.

Reprinted from Norwalk Herald, February 27, 1940.

Five Doctors Signed The Declaration of Independence

We doubt if one physician in ten thousand can name the entire five who signed this patriotic document. Not one in a hundred can name more than one member. We reproduce the five names in order that you may add them to your book of knowledge: Joshua Bartlett and Matthew Thornton from New Hampshire, Oliver Wolcott from Connecticut, Lyman Hall from Georgia, and Benjamin Rush from Pennsylvania.—Ill. Med. Journal.

After Ten Years

By CARL C. FRANCIS, M.D., WILMONT F. SCHNEIDER, M.D., AND MELVIN E. YEIP, M.D.

CLEVELAND, OHIO

IN connection with the tenth reunion of the class of 1930 of the School of Medicine of Western Reserve University, a questionnaire was sent to each member. The aim was to secure information not only upon the professional activities of this group, but to include enough general information to sketch a fairly complete picture. Over 60 items, many with subheadings, were included, and they fell naturally into five major divisions: (1) the practice of medicine and professional relations; (2) vital statistics and health; (3) financial status; (4) recreation and hobbies; and (5) community and public health relations.

Of the 53 living alumni, 41 filled in and returned the blanks—an excellent response indicating an unusually high degree of interest and cooperation from an alumni group. Some individuals felt that they were unable to express an opinion upon certain questions, but for the most part the answers were complete.

Twenty-four members of the class reported that they were in general partice, 16 that they were in some specialty, nine were engaged in institutional work—two of these teaching full time. One was not in practice. Of the specialists six were in pediatrics, four in general surgery, three in diseases of the chest, two in radiology, two in obstetrics and gynecology, and one in each of the following: hospital administration, neurology, psychiatry, allergy, dermatology, and cancer therapy. In several instances two specialties were listed by the same person. Nine were diplomates of the board of their specialty.

Nine held teaching positions in a school of medicine, ten taught classes in nursing, two taught in a liberal arts college, one taught first aid, and one child guidance. Thirty-five had a hospital connection, 24 held visiting staff appointments, and 19 did some dispensary work. Thirty-one included charity work in their practice.

Forty belonged to the local medical association and to the American Medical Association, 25 being Fellows of the latter. Thirty-eight had taken an active part in professional meetings and ten had held office in a local society—seven as secretary, two as vice-president, three as president, and three as treasurer. Fifteen attended state meetings fairly regularly, twelve national meetings, and two international.

Thirty reported that they read the *Journal of the American Medical Association* and ten the *Ohio State Medical Journal.* (Only two-thirds of the class reside in Ohio.) A wide variety of other medical journals is read and effort is made to keep up on the current medical literature of the particular interests. Nearly all belonged to scientific societies allied to medicine.

Twenty-one maintained a separate office and six were in partnership. Twenty-eight sent out statements regularly. Five collected 95 per cent of their accounts, sixteen, 80-90 per cent, four, 70-80 per cent, seven, 60-70 per cent, and one less than 60 per cent. Nearly all who were actually engaged in the practice of medicine included charity work.

It cost $2,000 or less a year for eight to practice medicine, between $2,000 and $3,000 for six, $3,500 for one, $4,000 for five, and $4,500, $4,800, $5,000, and $6,500 for one each.

It is interesting to note here the summary of responses of practitioners to medical school courses. Ten felt that pathology was the most valuable course in the medical curriculum, eight anatomy, eight physiology, three internal medicine, and one surgery. Eight did not answer this question. Five said they believed that medical school work should be more practical. Nine specified the need for more medical economics, three for more psychology, three for more training in drug reactions, and three for more training in physiotherapy. Several stressed the desirability of better relations between students and faculty. Twelve felt that the outstanding need in premedical training was better foundation in the liberal arts, three in mathematics, two in premedical science, and four believed that less time should be given to premedical training and more to medical.

Ten believed that the greatest need within the medical profession was more good general practitioners, seven more honesty in medical practice, five better facilities for postgraduate work, and six more medical economics.

The responses under the heading of vital statistics and health indicated that good health and vigor had been enjoyed by the class. The age range at the time the questionnaire was sent out was 33 to 40 years, the larger number being between 35 and 37. One-fourth of the class was still unmarried. Of the 31 who were married nine had one child, 11 two children, three, three, and one four.

Many members of the class had been hospitalized but only one had a serious operation and he was making complete recovery. In spite of an active professional life most of the class had

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The committee wishes to acknowledge the assistance of Dr. Howard P. Taylor, Miss Irena Barnum, and Dr. Torald Sollmann in preparing the questionnaire.

not changed greatly in physical appearance in 10 years.

Five men believed that they now have a physical handicap which might have been prevented or alleviated by a more efficient student health service. It must be remembered in this connection that the present health service of the university was just getting under way during the student days of this class.

Although this class began the practice of medicine during the depression, their financial status was found to be good. Twenty owned their own homes. Each had at least one automobile, and 14 more than one, the most popular being the Ford and the lower priced General Motors cars. Thirty-five felt that their present income was adequate for their needs, two that it was inadequate, and four did not answer. The range of net incomes was from somewhat less than $2,500 to more than $10,000 with the average between $5,000 and $7,500. All but two carried some form of life insurance and the group as a whole appeared to be well protected in case of accident and illness. For investment, 13 preferred real estate, 18 government bonds, and 15 private stocks or bonds.

For recreation 12 persons preferred golf, nine reading, and a few hunting, fishing, or hiking. Twenty read the Readers' Digest, 18 Life, 17 The Saturday Evening Post, 16 Time, seven The National Geographic, six The American Magazine, five Colliers, four Fortune, four Harpers, and four News Week. Twenty preferred an outdoor hobby and 21 an indoor hobby, 13 of the latter mentioning photography.

An analysis of the replies about community and public relations revealed the following: Fifteen said that they took some part in the religious life of their community, 14 had lodge affiliations, and 14 were interested in recreational programs. Apparently none took an outstanding part in such activities. None held a political position. Seventeen stated that they were Republicans, eight Democrats, and the rest that they had no political affiliation. Twenty-six believed that a Democrat would be elected President of the United States in 1940, 10 favored a Republican, and the rest were undecided. However, the blanks were sent out in January, 1940, and returned during the next two months.

The average man of the class was in general practice, doing dispensary work in the hospital with which he was connected, belonged to the American Medical Association, took an active part in professional meetings, and regularly read medical journals. He maintained a separate office, collected between 80 and 90 per cent of his accounts, and it cost him about $2,500 a year to practice his calling. He believed that the greatest need of the medical profession was more good honest general practitioners and that medical students needed more training in medical economics and a better foundation in liberal arts during their premedical years. After being out of school ten years the average alumnus was 36 years old, in good health, had an income adequate to his needs, and was fond of golf, reading, and photography as leisure activities.

Dates Set for Post-Collegiate Medical Assembly at Ohio State University

The Eighth Annual Post-Collegiate Assembly of the Ohio State University College of Medicine will be held at Columbus, Tuesday, Wednesday and Thursday, April 15, 16 and 17. The occasion will celebrate the 107th anniversary of continuous medical teaching at Columbus.

The program will begin Tuesday evening with the annual Alpha Omega Alpha lecture. Wednesday will be devoted to roundtable conferences, symposiums and guest lectures, with class reunion banquets in the evening. On Thursday there will be more roundtables, demonstrations, guest lectures and symposiums, and fraternity banquets in the evening.

An intensive course in Hematologic Diseases will be given April 14-19, by the Department of Medical Research in conjunction with the American College of Physicians.

Dr. Russel G. Means, Columbus, is chairman of the committee which is arranging the program for the Assembly. All Ohio physicians are cordially invited to attend.

Association To Take Part in Meeting on "Community Coordination and Defense"

Devoted to the theme, "Community Coordination and Defense", a conference of 10 sections, including one on community health, will be held at Columbus February 13, 14, and 15. The Ohio State Medical Association, through its Bureau of Public Education, will participate in both the exhibit and the conference sessions.

Dr. Carl Wilzbach, Cincinnati Health Commissioner and chairman of the State Association's Subcommittee on Public Health Education, will serve as chairman of the section on health.

Attendance of more than 1000 teachers, welfare workers, Parent-Teacher organization officials, and members of other groups interested in community agencies and problems is anticipated. The conference, which is being promoted by the American Association for Adult Education, will study the problem of maintaining proper emphasis on all community activities during the time of preparation for national defense.

The exhibit planned by the Bureau of Public Education will stress the role of the medical society on a community health program.

Enabling Act for Medical Service Plans, Sponsored by Ohio State Medical Association, Before Legislature; Personnel of Health and Other Important Committees Announced

REGULAR session of Ohio's Ninety-Fourth General Assembly convened on January 6 and if history repeats itself, the lawmakers will consider no less than 100 proposals having health and medical angles before it adjourns. Leaders of the Assembly are committed to a short session. If this promise is carried out the Assembly will finish its business before mid-May.

So far as the medical profession is concerned, the most important event during the early weeks of the Legislature was the introduction of the proposed Enabling Act for Medical Service Plans, actively sponsored by the Ohio State Medical Association.

This bill, known as House Bill 51, was introduced on January 21 by Miss Margaret A. Mahoney, state representative from Cleveland. (See page 159 for text of proposal.) Miss Mahoney, Cleveland attorney, is serving her second term in the State Legislature and has a splendid record. She is personally enthusiastic about the proposed Enabling Act and its purposes.

Promotional activities on behalf of House Bill 51 have been launched by the Sub-Committee on Legislation and the Committee on Medical Service Plans of the State Association, assisted by the Bureau of Public Education.

HANDBOOK AND PAMPHLETS PUBLISHED

A "Handbook on the Enabling Act" has been prepared and copies mailed to all local legislative committeemen and presidents and secretaries of county medical societies. This handbook contains the text of the proposal, arguments as why the measure should be enacted, pertinent questions and answers about the bill and medical care plans generally, and comments from individuals, organizations and newspapers about the proposal and such plans. This is intended as a "working handbook" to assist legislative committeemen and others in presenting information about House Bill 51 to members of the State Legislature and the public at large. **However, any member of the State Association may obtain a copy by writing the Headquarters Office, Columbus.**

In addition to the handbook, a revised pamphlet, written primarily for laymen, has been published. Copies have been furnished to local legislative committeemen and county society officers for distribution to civic organizations, luncheon clubs, school groups, health and welfare groups, fraternal societies, and similar organizations for the purpose of acquainting the public about House Bill 51 and winning public support for it. **Members who believe they can place copies of this pamphlet advantageously or who would like to give copies to their patients may obtain a reasonable supply by writing to the Headquarters Office, Columbus.**

Plans are being completed for a number of radio broadcasts about the Enabling Act and medical service plans in cities where broadcasting facilities are available.

EVERY MEMBER MUST HELP

This comprehensive promotional program will undoubtedly have a beneficial effect. However, as stated in a recent bulletin issued by the Legislative Committee to local committeemen and officers: "The fate of the Enabling Act will hinge primarily on the amount of influence which the medical profession locally will have with representatives and senators from the various counties and districts. *** The job of winning his (the legislator's) active support and acquainting him with the intent and provisions of the bill is one which each county medical society, its committeemen and its officers must undertake." Obviously, what this statement means is that all members of the medical profession must do something individually to promote passage of the bill.

The Journal during the past 12 months has presented much information and many arguments about the Enabling Act and its purposes. Members are urged to review issues of *The Journal* on this subject and to request the Columbus office to send additional information if more facts are desired.

PERSONNEL OF IMPORTANT COMMITTEES

The first two weeks of the legislative session were devoted almost entirely to organization details and participating in the inaugural ceremonies for Governor Bricker, his cabinet and other elected state officials.

In organizing, the State Senate elected Senator Frank E. Whittemore, Akron, a veteran member of the upper house, as president pro tem. Senator Whittemore will serve as Republican floor leader, a position he has held on numerous occasions during his long legislative service. Senator William M. Boyd, Cleveland, was selected by the Democratic members as floor leader for the minority. Senator Boyd is beginning his fifth term as a member of the General Assembly.

The House of Representatives re-elected Representative William M. McCulloch, Piqua, as speaker, a position which he filled during the 1939-40 session, and Representative Harold W. Houston, Urbana, as speaker pro tem (Republican floor leader), an office which he occupied during part of the session in 1939-40. The Democratic minority in the House elected Representative Harold L. Mason, Upper Sandusky, as its floor leader.

HEALTH COMMITTEES CHOSEN

Most of the bills in which the medical profession will be especially interested probably will be given hearings by the health committees of the Senate and the House. The Senate Health Committee is headed by Dr. H. T. Phillips, Athens, as chairman. Dr. Phillips represents the 9th-14th Senatorial District. He is starting his third term in the General Assembly and served with distinction as chairman of the Senate Health Committee in the Ninety-Third General Assembly. Another member of the committee is Dr. George G. Hunter, Ironton, senator from the 7th-8th District. Dr. Hunter is serving his second term in the Assembly. Other members of the Senate Health Committee are: Senator Lawrence A. Kane, Cincinnati, vice chairman, starting his seventh term in the General Assembly during which time he has served as a member of either the Senate or House health committee; Senator D. A. Liggitt, Belle Center, Logan County; Senator P. H. Rogers, Grafton, Lorain County; Senator O. E. Whitaker, Minerva, Carroll County, a former chairman of the House Health Committee in 1937-38; and Senator Johnny Kilbane, Cleveland. Senators Whitaker and Kilbane are Democrats; the other five members, Republicans.

Dr. E. LeFever, Glouster, Athens County, the oldest member of the Ninety-Fourth General Assembly in point of service, was appointed by Speaker McCulloch as chairman of the House Health Committee. Dr. LeFever is starting his 11th term as a member of the State Legislature. In every Assembly of which he was a member, Dr. LeFever has ably served as chairman or a member of the health committee. Also, appointed a member of the House Health Committee was Dr. F. R. Stewart, Ironton, Lawrence County, serving his first legislative term. Other members of the committee are: Representatives John Hayden, Clermont-co; John L. Catlett, Richland-co; R. H. Hildebrant, Clinton-co; Cecil Milligan, Highland-co; Titus B. Johnston, Defiance-co; John S. Seymour, Lucas-co; Frank J. Pokorny, Cuyahoga-co; Guy S. McKelvey, Monroe-co; John J. Day, Cuyahoga-co; A. A. Shilling, Stark-co, and Bernice L. Keplinger, Stark-co. Pokorny, Day, McKelvey, Shilling and Miss Keplinger are Democrats.

OTHER ASSIGNMENTS

Personnel of other important committees follows:

Rules Committee (Senate)—Senators Whittemore, chairman; Kane, vice president; Jones, Meigs-co; Ward, Franklin-co; Nickels, Tuscarawas-co; Adams, Wood-co; Whitney, Delaware-co; Boyd, Cuyahoga-co; and Lipscher, Mahoning-co.

Rules Committee (House)—Speaker McCulloch, chairman; Addison, Franklin-co; Asmann, Hamilton-co; Houston, Champaign-co; Knepper, Williams-co; Mason, Wyandot-co; and Carney, Cuyahoga-co.

Reference Committee (House)—Representatives Deddens, chairman, Hamilton-co; Best, Franklin-co; Betts, Hancock-co; Fair, Holmes-co; Miller, Lucas-co; and Stephenson, Columbiana-co.

Insurance Committee (Senate)—Senators Whitney, chairman, Delaware-co; Adams, vice chairman, Wood-co; McKie, Hamilton-co; Hunter, Lawrence-co; Reiners, Hamilton-co; Baertschi, Lucas-co; and Vanik, Cuyahoga-co.

Insurance Committee (House)—Representatives Best, chairman, Franklin-co; Asmann, Hamilton-co; King, Clark-co; Kowalk, Sandusky-co; Ogan, Putnam-co; Peirce, Huron-co; Thompson, Noble-co; Cantwell, Mahoning-co; Kasch, Summit-co; McClure, Henry-co; Mahoney, Cuyahoga-co; Pokorny, Cuyahoga-co; and Zona, Cuyahoga-co.

Governor Asks for More Money for State Industrial Commission

A larger appropriation for the Medical Department of the State Industrial Commission was recommended by Governor John W. Bricker in a address to the members of the Ohio Senate and House of Representatives meeting in joint session at Columbus, Wednesday evening, January 15.

After explaining the strong financial position of the State Insurance Fund, which has increased over $7,500,000 during the past two years, and pointing out that approximately 214,000 claims were filed in 1940, an increase of 17 per cent, the Governor said.

"I bring this to your attention because the Commission may ask for an increased appropriation, particularly in the medical department. I urge your consideration and approval of such a request".

HOUSE BILL 51

(Introduced in the House of Representatives, Ohio General Assembly, January 21, 1941, by Margaret A. Mahoney, Cuyahoga County.)

To promote public health and to effect a wider distribution of medical care in this state by authorizing corporations not for profit to establish and operate medical care plans for the benefit of subscribers making periodic payments; to provide for the supervision and regulation of such corporations by the superintendent of insurance; and to prescribe penalties for the violation of the provisions of this act.

Be it enacted by the General Assembly of the State of Ohio:

Section 1. Corporations not for profit organized under the laws of this state, upon compliance with the provisions of this act, shall be authorized to establish, maintain, and operate a voluntary non-profit medical care plan, whereby professional services are provided at the expense of such corporation to such persons or groups of persons as shall become subscribers to such plan under contracts which will entitle each such subscriber to certain professional services by duly licensed physicians and surgeons in their offices, in hospitals, and in the home, and to certain appliances and supplies incidental to such care. The term "professional services" shall not be construed to include services rendered by hospitals.

Section 2. No contract such as mentioned in the foregoing section shall provide for the payment of any cash or other material benefit to a subscriber or his estate on account of death, illness, or injury, nor be in any way related to the payment of any such benefit by any other agency.

Section 3. The board of trustees of any corporation holding a certificate of authority or license from the superintendent of insurance, provided for under this act, shall have representation from the public and from duly licensed physicians and surgeons of this state.

Section 4. The name of any corporation holding a certificate of authority or license from the superintendent of insurance under this act shall not include the words "insurance", "casualty", "surety", "health and accident", "mutual", or other words descriptive of the insurance or surety business, and such name shall not be so similar to that of any insurance or surety company doing business in this state as to tend to create confusion in identity therewith.

Section 5. Before it may issue any contract or certificate to a subscriber a corporation not for profit desiring to establish, maintain, and operate a medical care plan must obtain from the superintendent of insurance a certificate of authority or license to do so. Each application to the superintendent of insurance for such certificate of authority or license shall be verified by an officer of the corporation, and shall set forth, or shall be accompanied by, the following:

(a) A copy of the corporation's articles of incorporation, and of any amendments thereto, certified by the secretary of state, which shall define with reasonable certainty the territorial boundaries within which such corporation proposes to operate a non-profit medical care plan and the location of the principal office for the transaction of its business;

(b) A copy of the corporation's regulations and by-laws, which shall provide that all duly licensed physicians and surgeons in this state, residing within such territorial boundaries, shall be eligible to render professional services to subscribers under the proposed medical care plan upon compliance with the uniform requirements prescribed by such corporation;

(c) A list of names and residence addresses of all officers and trustees of said corporation;

(d) A description of the medical care plan which the corporation proposes to operate, together with the forms of all contracts or certificates which the corporation proposes to issue under such plan;

(e) A copy of each agreement theretofore entered into between such corporation and duly licensed physicians and surgeons for the rendition of professional services under such plan;

(f) A statement of the assets and liabilities of the corporation;

(g) A statement setting forth the sources of the funds with which the corporation expects to begin operation of such plan, including the name and address of each contributor thereto and the terms upon which such contribution has been or will be made;

(h) Evidence satisfactory to the superintendent of insurance that the medical care plan which the corporation proposes to operate, the articles of incorporation and any amendments thereto, and the regulations and by-laws of such corporation have each been approved by the established medical association, society or academy of each county lying wholly or partly within the territorial boundaries described in the articles of incorporation or any amendments thereto. The term "established medical association, society or academy", as used herein, means the medical association, society or academy maintained in the county by a majority of the duly licensed physicians and surgeons residing therein.

Such approval shall be evidenced by an affidavit of the president and the secretary of each such established medical association, society or academy; the superintendent of insurance shall be entitled to rely upon such affidavit, but may make such independent investigation of the facts therein set forth as he may deem advisable.

Section 6. The superintendent of insurance shall issue a certificate of authority or license to any corporation filing an application in conformity herewith, upon payment of the fees hereinafter prescribed, and if it appears:

(a) That such corporation proposes to establish and operate a non-profit medical care plan of the type described in Section 1 hereof;

(b) That the terms of the proposed contracts or certificates to be issued to subscribers are fair and reasonable;

(c) That a valid written agreement or agreements have been entered into by such corporation with at least ten (10) duly licensed physicians or surgeons, each of whom agrees thereby to render professional services in accordance with such plan for a period of at least one year, which agreement or agreements shall not be revocable by any such physician or surgeon until the expiration of thirty (30) days following the receipt by the corporation from such physician or surgeon of notice of revocation;

(d) That such proposed plan is established upon a sound financial basis;

(e) That such corporation has a cash surplus of at least five thousand dollars ($5,000.00);

(f) That all the provisions of this act have been complied with.

Upon the receipt by the superintendent of insurance of an application for the issuance of an original certificate of authority or license under this act, the superintendent of insurance shall give notice in writing of such application to each and every corporation holding a certificate of authority or license under this act and in such notice shall set a date for hearing for the purpose of determining whether the certificate or license shall be issued, which hearing shall be held not less than twenty (20) days after the issuance of such notice by the superintendent of insurance. Any corporation entitled to such notice shall have the right to appear and be heard upon the question of the granting or refusing of such application.

Section 7. No amendment of the articles of incorporation of such corporation filed with the secretary of state, as provided by law, shall be effective for the purposes of this act until approved by the superintendent of insurance, and no amendment of the regulations or by-laws, or of the medical care plan, or of the forms of contracts and certificates to be issued under such plan, shall be effective until it shall have been on file with the superintendent of insurance for ten (10) days without disapproval by him.

Section 8. No corporation holding a certificate of authority or license under this act shall operate a medical care plan outside the territorial boundaries defined in its articles of incorporation or any amendments thereto or shall accept as a subscriber a person residing outside such territorial boundaries; provided, however, that contracts or certificates, issued to subscribers under the provisions of this act, may provide for the furnishing to subscribers, in cases of emergency only, of professional services by duly licensed physicians and surgeons at points outside the territorial boundaries defined in the articles of incorporation or any amendments thereto.

Section 9. Every corporation subject to the provisions of this act shall pay the same tax as that levied against domestic insurance companies and shall be entitled to the same exemptions allowed such corporations.

Every such corporation shall pay to the superintendent of insurance the following fees:

For filing a copy of its articles of incorporation, twenty-five dollars ($25.00);

For filing each financial statement, twenty dollars ($20.00);

For each certificate of authority or license, or any certified copy thereof, two dollars ($2.00).

Section 10. Every such corporation shall file a report, verified by an officer of the corporation, with the superintendent of insurance annually on or before the first day of March, as of the last day of the preceding calendar year, on forms prescribed by the superintendent of insurance, which report shall include:

(a) The financial statement of such corporation, including its balance sheet and its receipts and disbursements for the preceding year;

(b) A list of names and residence addresses of all officers and trustees;

(c) The number of subscribers' contracts or certificates issued and outstanding;

(d) The number of duly licensed physicians or surgeons with whom such corporation has existing written agreements of the type described in Section 6(c) hereof, together with copies of all such agreements not theretofore filed with the superintendent.

Section 11. Unless sooner revoked, each certificate of authority or license shall expire on the 31st day of March next following the date of its issue, but shall be renewable for successive periods of one year each, as of the first day of April.

Section 12. Such corporation shall maintain an unearned premium reserve in accordance with the requirements of section 9607-24 of the General Code.

Section 13. Any trustee, officer or member of any corporation subject to the provisions of this act, or any other person, may advance to such corporation any sum or sums of money necessary for the purpose of its business, or to enable it to comply with any requirement of the law. Such monies, and such interest thereon as may have been agreed upon, not exceeding eight per centum (8%) per annum, shall not be a liability or claim against the corporation, or any of its assets, except as herein provided, and shall be repaid only out of the surplus earnings of such corporation; and, except as otherwise approved and ordered by the superintendent of insurance, no part of the principal thereof shall be repaid until the surplus of the corporation remaining after such repayment is equal in amount to the principal of the money so advanced. Such advancement and repayment shall be subject to the approval of the superintendent of insurance, provided that this section shall not affect the power to borrow money which any such corporation possesses under other laws. No commission or promotion expenses shall be paid by the corporation, in connection with the advance of any such money to the corporation, and the amount of any such unpaid advance shall be reported in each annual statement.

Section 14. The funds of any corporation subject to the provisions of this act shall be invested only in securities permitted by the law of this state for the investment of capital surplus and accumulations of domestic life insurance companies.

Section 15. No person employed by or for a corporation subject to the provisions of this act shall solicit, receive, procure or forward an application for a subscriber's contract unless licensed by the superintendent of insurance under the provisions of section 644 of the General Code of Ohio and the superintendent shall establish a proper classification for the purpose of licensing such person or persons. Unless sooner revoked or cancelled, each license issued hereunder shall expire on the 31st day of March next following the date of its issue.

Section 16. The superintendent of insurance, or a person appointed by him for that purpose, may make an examination of the affairs of any such corporation. Such corporation, its officers and agents, shall submit their books and business to such examination and in every way facilitate it. For the purpose of such examination, the superintendent, or other person so appointed, shall have authority to administer oaths to and examine the officers and agents of such corporation relating to its business and affairs.

Section 17. Any rehabilitation, liquidation, conservation or dissolution of a corporation subject to the provisions of this act shall be conducted under the supervision of the superintendent of insurance, who shall have all the power with respect thereto granted to him under the provisions of law governing the rehabilitation, liquidation, conservation or dissolution of insurance companies generally.

Section 18. The superintendent of insurance shall refuse to renew a certificate of authority or license issued hereunder, or shall revoke any such certificate or license, if it appears:

(a) That such corporation is operating in contravention of its articles of incorporation or any amendments thereto, or of its regulations and by-laws, or of its medical care plan;

(b) That such corporation is unable to fulfill its obligations under its outstanding contracts or certificates issued to subscribers;

(c) That such corporation has failed to maintain a surplus of at least five thousand dollars ($5,000.00);

(d) That the number of duly licensed physicians or surgeons with whom such corporation has existing written agreements of the type described in Section 6(c) hereof is less than one (1) for each five hundred (500) subscribers holding contracts or certificates issued by such corporation;

(e) That such corporation has violated, or has failed to comply with, any of the provisions of this act.

Section 19. The finding of the superintendent of insurance in granting, revoking, renewing, or in refusing to grant, revoke or renew, a certificate of authority or license under the provisions of this act, shall be in writing and shall state the facts upon which his action is based. The superintendent of insurance shall immediately mail a copy of his written finding to the applicant for or holder of such certificate of authority or license and to each corporation holding a certificate of authority or license under this act at the addresses on file in the office of the superintendent. The action of the superintendent of insurance in granting, revoking, renewing, or in refusing to grant, revoke, or renew, such certificate of authority or license, shall be subject to review by appeal to the court of common pleas of Franklin County, Ohio, provided such appeal shall be filed by an interested party, including any corporation holding a certificate of authority or license under this act, within thirty (30) days after such written finding by the superintendent and the giving of notice thereof as aforesaid. Said cause shall proceed as a new civil action, with the right of either party to submit evidence and to appeal, and said court shall have jurisdiction upon reasonable notice to the superintendent of insurance, and after a hearing, to restrain said action of the superintendent, and in the event such restraining order is granted, said cause shall be tried as soon as it can be conveniently heard.

Section 20. Any corporation not for profit holding a certificate of authority or license from the superintendent of insurance under this act shall be exempt from the laws of Ohio governing insurance corporations, except as provided in this act.

Section 21. An employee or employees of the state of Ohio or of any political subdivision or district of the state of Ohio, or of any institution supported in whole or in part by the state, may authorize the deduction from his or their salaries or wages of the amount of his or their subscription payments to any corporation provided for in this act. Such authorization shall be evidenced by an approval of the head of the department, division, office or institution in which such employee or employees may be employed.

In the case of employees of the state of Ohio, such authorization shall be directed to and filed with the auditor of state. In the case of employees of a county, city, village, township or other political subdivision or district of the state of Ohio, such authorization shall be directed to and filed with the auditor or other fiscal officer of such county, city, village, township or other political subdivision or district of the state. In the case of employees of any institution supported in whole or in part by the state of Ohio, such authorization shall be directed to and filed with the auditor or other fiscal officer of such institution.

Upon the filing with him of such authorization, such auditor or fiscal officer shall draw a warrant or warrants in favor of the medical care corporation referred to in such authorization for the amount covering the sum total of the deductions so authorized.

Section 22. Each such corporation may, in its discretion, receive and accept from governmental agencies payments covering all or part of the cost of contracts entered into between such corporation and subscribers. Each corporation may, in its discretion, receive and accept from private agencies, corporations and associations, groups, or individuals payments covering all or part of the cost of contracts entered into between such corporation and subscribers.

Section 23. Whoever violates any of the provisions of this act or shall knowingly make any false statement in any report or statement required by this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished as follows: For the first offense be fined not less than twenty-five dollars ($25.00) nor more than five hundred dollars ($500.00); and for each subsequent offense be fined not less than fifty dollars ($50.00) nor more than five hundred dollars ($500.00), or imprisoned in the county jail or work house not less than thirty (30) days nor more than one year, or both.

Section 24. Duly licensed physicians and surgeons in rendering professional services under a medical care plan operated pursuant to this act shall not be deemed thereby to be guilty of a violation of section 1275 of the General Code. Notwithstanding anything contained in this act or in any such medical care plan, the relationship between a duly licensed physician and surgeon rendering professional services under such plan and such subscriber shall constitute the ordinary relationship of physician and patient; and no action based upon or arising out of such relationship shall be maintained against a corporation operating a medical care plan in compliance with the provisions of this act.

Coming Meetings

House of Delegates, Ohio State Medical Association, Cleveland, June 3-4.

American Medical Association, Cleveland, June 2-6.

American College of Physicians, Boston, April 21-25.

American Association of Anatomists, Chicago, April 9-11.

American Association of Pathologists and Bacteriologists, New York, April 10-11.

American College of Physical Therapy, Washington, D. C., Sept. 1-5.

American Gastro-Enterological Association, Atlantic City, May 5-6.

American Roentgen Ray Society, Cincinnati, Oct. 6-11.

American Society for Clinical Investigation, Atlantic City, May 5.

American Urological Association, Colorado Springs, May 19-22.

Annual Conference, Committee on Medical History and Archives, Columbus, April 4.

Annual Congress on Medical Education and Licensure, Chicago, Feb. 17-18.

Central Surgical Association, Ann Arbor, Mich., Feb. 28-March 1.

Northern Tri-State Medical Association, Tiffin, April 8.

Ohio State University Post-Collegiate Medical Assembly, Columbus, April 15-17.

Final Request Made for Immediate Return of A.M.A. Preparedness Questionnaires; More Ohio Physicians Called to Service

AS this issue of *The Journal* went to press, steps were being taken by the Committee on Medical Preparedness of the Ohio State Medical Association and similar committees of county medical societies to complete the work of obtaining preparedness questionnaires from all Ohio physicians for filing with the Committee on Medical Preparedness of the American Medical Association.

Up to January 13, a total of 8,302 Ohio physicians, or 89 per cent, had returned questionnaires to the A.M.A. office at Chicago. Lists of physicians who, up to January 13, had not returned a questionnaire have been forwarded to local preparedness committees, together with questionnaires to be filled out and envelopes for returning the completed form to the State Headquarters Office, Columbus, which will send them to Chicago. Local committees have been requested to make a personal solicitation of such physicians.

DEADLINE ON QUESTIONNAIRES

The deadline for return of questionnaires is February 15. After that date, the names of physicians who have not filled out a questionnaire will be forwarded to the A.M.A. office and that office will be forced to carry incomplete data about such physicians in its preparedness file. Obviously, when data is incomplete, a physician faces the hazard of not being placed in a proper classification and where he can be of the best service in event of war and the mobilization of the entire medical profession.

The physicians who are volunteering their services as draft board examiners were confronted with a gigantic task during January when between 9,000 and 10,000 Ohioans were drafted and ordered to induction centers. Because of the work involved and the influenza epidemic, many additional examiners had to be nominated by local preparedness committees and appointed by State Selective Service Headquarters.

GENERAL EXPRESSES APPRECIATION

Appreciation for the job being done by the draft boards, medical personnel and others since the Selective Service system started to operate in Ohio is expressed in a communication received by Governor Bricker from General C. A. Trott, commander, Fifth Corps Area, Fort Hayes, Columbus, reading in part as follows:

"At the completion of the first induction period I wish to express to you my appreciation for the splendid spirit of cooperation so evident among all the personnel of your state engaged in selective service work. Reports from induction station commanders amply confirm this fact. Those of the military establishment who have studied the operation of the Selective Service System realize the magnitude of the task performed by the civilian agencies engaged in this work. I believe that no one, more than the military personnel, appreciates the patriotic service which is being rendered by members of local boards, advisory and appeal boards, by medical examiners, and the many others who are giving their time and effort gratuitously in the furtherance of National Defense."

"TEAM" METHOD SUCCESSFUL

Some of the problems which slowed up the examining work during the early months are being ironed out. In many cities, physicians are now working in teams, handling large numbers of registrants during a specified period. Colonel Boucher, chief medical officer for Selective Service, recommends that this method be tried in as many places as possible, especially in areas where there has been a heavy registration of potential draftees.

TOO MANY FINAL REJECTIONS

However, State Selective Service Headquarters and induction officers of the Fifth Corps Area are disturbed about the rather large number of Ohio selectees of the January quota of approximately 9,000 who were rejected by examiners at induction centers because of physical or mental disabilities not detected by draft board examiners.

The percentage of rejections for medical reasons at the induction centers in the Fifth Corps Area on January 20 were as follows: Fort Hayes, Columbus, 19%; Fort Thomas, Kentucky, 8%; Cleveland, 13%; and Toledo, 18.4%, an average of 14.6%. On January 21, the figures were as follows: Fort Hayes, 11.2%; Fort Thomas, 7.5%; Cleveland, 13.9%; and Toledo, 18.7%, an average of 12.8%.

Data reveal that the reason for the greatest number of rejections at the induction centers was "insufficient teeth", there being a wide discrepancy between the decisions of the local examining physicians and the induction board examiners on the question of proper number of teeth.

However, some selectees were rejected at induction centers for conditions which should have

been detected by the draft board examiners, such as defective vision, acute gonorrhea, valvular heart disease, hernia, spinal deformities, underweight, flat feet, and obvious mental deficiencies.

Selective Service Headquarters is preparing a memorandum on this question which will be sent soon to all draft board examiners in an effort to clarify some of these situations and point out some of the errors which should be avoided.

Draft board examiners are urged to conform to the medical standards and regulations in making their examinations and to perform them as carefully as possible. Also, it is suggested that doubtful or borderline cases be referred to a Medical Advisory Board for review.

Dr. R. H. Markwith, state director of health, has announced that blood tests for syphilis which have been given to 31,101 draftees reveal a percentage of 2.3 positive. A breakdown of the figures for the first 20,296 tests made showed a positive percentage for white draftees of 1.48 and for colored draftees, 13.9.

MORE ORDERED TO ACTIVE SERVICE

During the last month, 50 more Ohio medical reserve officers have been ordered to at least one year's active service. Also, the War Department has announced that the Medical Reserve Corps has been opened to enlistments if physicians who can qualify for a commission will consent to a year's active service starting at the time of enlistment.

Ohio medical officers who were called for active service during the past month and their assignments are as follows:

Ft. Bragg, N. C.: Capt. Wm. M. Jennings, Jr., Sylvania; 1st Lt. Woodrow M. Campion, Cleveland; 1st Lt. Aubrey L. Sparks, Warren; 1st Lt. Irvin B. Beren, Cincinnati; 1st Lt. Shepard A. Burroughs, Ashtabula; 1st Lt. Fred L. R. Tingwald, Youngstown.

Ft. Jackson, S. C. for assignment with 8th Medical Battalion and subsequently to new Medical Battalions (Corps) to be activated February 10, 1941: Capt. Lawrence H. Goodman, Findlay; Capt. Raymond J. Borer, Toledo; Capt. Arthur A. Brown, Canal Fulton; Capt. George R. Krause, Cleveland; Capt. Martin L. Sherman, Dayton; Capt. Walter B. Johnston, Lakewood; 1st Lt. Irving L. Berger, Cleveland Heights; 1st Lt. Michael L. Matteo, Cleveland; 1st Lt. Ezra I. Silver, Cleveland; 1st Lt. Frederick R. Smith, New Paris.

Ft. Jackson, S. C.: Capt. Meyer Hantman, Cleveland.

Ft. Knox, Ky.: Capt. Albert Kostoff, Columbus; Capt. Robert H. Lechner, Berea; Capt. Sidney R. Stone, Cleveland; Capt. Daniel F. Toth, Cleveland; Capt. Earl E. Smith, Shaker Heights; 1st Lt. Richard C. Carlisle, Columbus.

Camp Shelby, Miss.: Capt. Theodore C. Allenbach, Worthington; Capt. James W. Halfhill, Jr., Lima; Capt. Paul D. Meyer, Cleveland; Capt. Myron H. Steinberg, Youngstown; 1st Lt. Simon Bunin, Cleveland; 1st Lt. Louis S. Kish, Cleveland; 1st Lt. Edward G. Klopfer, Cleveland; 1st Lt. Clyde R. Milster, Columbus; 1st Lt. Harry K. Montgomery, Dayton.

Corps Area Service Command, Puerto Rico: Major Chas. H. Edel, Ashtabula; Major H. S. Shamansky, Columbus; Capt. Joseph J. Brumbaugh, Canton; Capt. Arthur Dobkin, Akron; Capt. Morris Kalmon, Akron; Capt. Reuben R. Pliskin, Akron; Capt. Jack Gilford, Cleveland Heights; Capt. Raymond E. Tyvand, Dayton; 1st Lt. George W. Speed, St. Marys; 1st Lt. Russell L. Shively, Toledo.

Rock Island Arsenal, Illinois: 1st Lt. Marcus D. Burnstine, Columbus.

Regular Army Headquarters, Washington, D. C.: 1st Lt. Louis Kreindler, Cincinnati; 1st. Lt. Meyer N. Margolis, Cincinnati.

Naval Hospital, Great Lakes, Illinois: Lt. John V. Horst, Upper Arlington.

Naval Hospital, Philadelphia: Lt. Comdr. Joseph S. Koehler, Dayton.

Active duty orders of the following, whose names were published in the January issue of *The Journal* with those called to active service, have been cancelled: 1st Lt. Jack Srulowitz, Belpre; 1st Lt. Herbert R. Stockwell, Dayton; 1st Lt. Andrew J. Lamb, Jr., Shaker Heights.

CHANCE FOR NAVY COMMISSION

The Surgeon General of the Navy, Rear Admiral Ross T. McIntire, has announced the next examination for appointments as commissioned officers in the Medical Department of the Navy will be held at all of the larger naval hospitals and at the Naval Medical Center, Washington, D. C., on May 12 to 15, inclusive, 1941. Applicants for appointment as Assistant Surgeon, effective approximately two months from date of examination, may now request authorization to appear for examination. Requests for such authorization should reach the Bureau of Medicine and Surgery, Navy Department, Washington, D. C., prior to April 21, 1941.

Applicants for appointment as Assistant Surgeon are required to be citizens of the United States between the ages of 21 and 31, graduates of Class "A" medical schools, have had at least one year of intern training in a hospital accredited for intern training by the Council on Medical Education and Hospitals of the American Medical Association, and to meet the physical and other requirements for appointment.

The Medical Corps of the Navy is being increased in strength proportionate with the expanding Navy and U. S. Marine Corps. In the normal rotation of assignments every practicable consideration is given the officer's preference for the type of duty he desires. The Naval Medical School at the Naval Medical Center, Washington, D. C., offers a course of postgraduate instruction and instruction in those branches of medicine which apply particularly to naval service.

Shortly before completion of his sea duty, the Navy doctor may request special training in the Medical Department specialty in which he is interested. If approved, the Navy doctor is sent to a hospital for training and experience in that specialty for one year. Upon completion of this training, he is assigned to postgraduate instruction at one of the many medical centers in the United States for a period up to one year after which, in so far as is practicable, he is retained in that type of duty.

Medical officers receive the same pay and allowances as other officers of the Navy in corresponding ranks and the equivalent amount of service. A circular of information for applicants for appointment as medical officers of the Navy, containing full information regarding physical requirements, professional examinations, rates of pay, and promotion and retirement data may be obtained by addressing the Bureau.

ARMY COMMISSIONS AVAILABLE

On December 19 the Adjutant General of the United States Army issued to all corps area and department commanders the following instructions:

> "1. The Surgeon General and Corps Area and Department Commanders are authorized to recommend for appointment sufficient applicants to fill any vacancies existing or occurring under the approved peacetime procurement objective for Reserve Officers in the Medical Department Reserve.
>
> "2. All appointments under this authority will be made in the lowest grade in the section in which commission is sought, and appointments will be limited to those who meet the requirements of AR 140-5 and AR 140-33.
>
> "3. Each application must be accompanied by a written statement by the applicant that he does not come within the category of those entitled to resign under the provisions of section 3 (c), Public Resolution 96, 76th Congress, or that he will not exercise such rights if ordered to active duty.
>
> "4. Current War Department instructions governing appointment in 'affiliated' medical units continue unchanged."

According to *The Journal of the American Medical Association*:

"The intent of these instructions is to enable the Surgeon General of the Army to commission in the Medical Reserve Corps young men who now hold positions as interns or residents or, indeed, any other medical positions of importance, and then to determine by suitable study whether or not their call to active service may be deferred until the completion of their internship or residency, or until their service is needed. The significant instruction is that under which the applicant agrees that he will not come within the category of those entitled to resign, and that he will not exercise the right to resign if ordered to active duty."

Interesting Study Made of Workmen's Compensation Claims Filed in 1939

The State Industrial Commission had published the 1939 Annual Statistical Study, prepared by the Division of Safety and Hygiene, of the 182,840 accident and occupational disease claims filed with the Commission during 1939, with a summary of the years 1930 to 1939 inclusive. During that decade, 1,762,997 Ohio employees filed claims with the Industrial Commission.

As in previous years, cuts and lacerations furnished the basis for more injury claims in 1939 than any other form of injury, 74,323 claims being based on injuries of this nature. Crushes and bruises were second in frequency with 30,249 claims. Sprains and strains gave rise to 25,216 claims; punctures 25,270; burns and scalds, 11,816; fractures, 10,486; traumatic amputations, 662; asphyxiations, 107; concussions, 181; drownings, 7; dislocations, 503; unclassified, 4,020. The report points out that these various classifications have held the same relative position in the order of the frequency of their occurrence ever since the assembling of statistics was begun by the Commission.

The record shows that 47,562 claims were filed last year for finger injuries. Eye injuries were next in importance with 32,236 claims; trunk, 25,177; legs, 18,400; arms, 18,465; hands, 14,103; head and face, 11,574; feet, 9,108; toes, 6,215. The amputations reported represent a loss of 7 arms, 3 hands, 636 fingers, 5 legs and 11 toes.

Included in the 10,485 fractures reported in 1939, were 65 of the transverse or spinous process; vertebrae, 259; sternum, 16; ribs, 1,317; sacrum or coccyx, 53; pelvis, 125; skull, 264; nose, 143; jaw, 88; teeth, 270; arms, 1,279; hand, 359; finger, 2,162; leg, 1,071; feet, 815; toe, 2,100. The severity of injuries of this nature is shown by the fact that these 10,486 fractures in 1939 caused a time loss to workers of 1,376,391 days.

Dr. John A. Toomey, professor of clinical pediatrics and contagious diseases in the School of Medicine of Western Reserve University, has received a grant of $1,000 supplementary to the $2,760 already made to him this year by the National Foundation for Infantile Paralysis to allow him to do additional work on his research on poliomyelitis.

Message from the President

NATIONAL DEFENSE; IMPORTANCE OF CONTINUOUS MEMBERSHIP

By WM. M. SKIPP, M.D., YOUNGSTOWN

ACTIVITIES for the year 1941 have started. The medical profession of Ohio must realize that tremendous tasks have been outlined for it during the months to come. One of these is to share in the responsibility of National Defense. Our profession never has shirked its responsibilities in providing the armed forces of the nation, as well as the civilian population, with the benefits of scientific medicine. It never will fail to meet this obligation, realizing that good health is an important factor in the defense of any nation.

Through the American Medical Association and its constituent state associations, including the Ohio State Medical Association, the medical profession is endeavoring to do its part in an organized manner. Efforts are being made to find out how and where each physician can be of definite help in the National Defense Program. That is the fundamental purpose of the A.M.A. Preparedness Questionnaire. We are proud of the fact that approximately 90 per cent of the physicians of Ohio have filled out and returned this questionnaire. We sincerely hope that the remaining 10 per cent will do so immediately. We must realize that our country is facing a critical period and that physicians, as well as all others, must make sacrifices now and later to give the country the strength which it needs now and must have in the immediate future.

With the return of the questionnaire from the entire medical profession both the government and the individual doctor will be helped. The former will be able to select medical men, when needed, according to their qualifications so each physician will not be a misfit for the job assigned to him. Better service can be expected through this method. On the other hand, the interests of the individual physician will be protected and no community will be deprived of necessary medical attendants. It is important that the health of those at home be maintained so that the fighting forces can be sustained.

At no time in our existence has it been more important for every member of the medical profession to be actively identified with the organizations which are working for his benefit and his existence. These organizations—the county medical society, State Association and American Medical Association—are directly dependent upon the support of the individual physician which support can not be given unless he becomes affiliated with them and keeps in good standing after affiliation. Your membership is important. If your 1941 dues have not been paid, send your check at once to your County Society Secretary-Treasurer. Don't neglect to keep your membership active. Also, may I appeal to each member of the Association to make himself a committee of one to interview eligible physicians who are not members, but who should be, and emphasize to them the importance of becoming a member immediately.

The need for united effort on the part of the medical profession has never been more evident. A few within our ranks would destroy the foundation of a system of medical service which has produced for Americans the best medical care of all time. They are playing into the hands of those who would transform the system into a bureaucracy and physicians into bureaucratic agents. Also, sound health laws can not be defended and maintained, or constructive new medical and health laws enacted, unless the medical profession takes the lead and shows a united front. Unity and hard work now and throughout 1941 should be our slogan, and will be of primary importance.

Open New Offices

Physicians who have opened new offices recently in Ohio include the following: Dr. Sanford Press, Steubenville; Dr. T. A. Coffin, Painesville; Dr. Lawrence Kempler, Gallipolis; Dr. J. M. Miller, Marion; Dr. Irvin B. Kievit, Custar; Dr. Henry Bachmann, Delaware; Dr. John Q. Brown, Columbus; Dr. Samuel K. Gerson, Lancaster; Dr. Wendell Butcher, South Charleston; Dr. Angelo Barbieri, Mansfield; Dr. Jack Sharp, Covington; Dr. Blanche Montgomery Meyer, Columbus; Dr. John A. Prior, Columbus; Dr. Allen M. Sakler, Salem; Dr. Harry Stein, Sandusky; Dr. Robert E. Williams, Barberton; Dr. L. H. Armentrout, Portsmouth; Dr. Edmund D. Wells, Newark; Dr. T. R. Mattocks, Marietta; Dr. Harry Geisler and Dr. Marianne Geisler, St. Marys; Dr. Donald R. Brumley, Tiffin; Dr. L. S. Pugh, Custar; Dr. C. H. Mumma, Dayton; Dr. B. R. Smith, Lewisburg; Dr. T. V. Gerlinger, Willard; Dr. Edward M. Chester, Berea; Dr. Roger C. Henderson, Xenia; Dr. Avery D. Powell, Attica; Dr. Herbert F. Kesinger, McArthur; Dr. G. J. Nordenbrock, St. Marys.

When, How and Where Physicians Should File Federal and State Tax Returns and Pay Taxes Which Are Due

MOST Ohio physicians, along with other taxpayers, must file certain Federal and State tax returns and pay certain taxes during the next few months. Stringent penalties can be avoided by prompt compliance with the laws governing such taxes.

These returns and taxes, with the place and last date for filing or payment include:

Federal Income Tax Information Return, listing salaries and wages paid to employees during 1940, with the Commissioner of Internal Revenue, Washington, D. C., **February 15;**

Ohio Personal Property Tax Return, with County Auditor, between **February 15 and March 31;**

Federal Income Tax Return for 1940, and first quarterly payment, with the District Collector of Internal Revenue, **March 15;**

Social Security (Old Age Benefits) Tax, affecting all employers of one or more persons, first quarterly informational return and tax for January, February and March, 1941, **April 30;**

State Unemployment Compensation Tax (for employers of three or more persons), Employers' Contribution Report and Tax, with the Bureau of Unemployment Compensation, Columbus, **January 31,** for period October 1 to December 31, 1940, and quarterly thereafter;

Federal Unemployment Compensation Tax (for employers of eight or more persons), with District Collector of Internal Revenue, **January 31,** for calendar year 1940;

Ohio Use Tax, Department of Taxation, Columbus, **April 15,** for period January 1 to March 31, 1941, and quarterly thereafter.

To assist members of the Ohio State Medical Association who are required to file the above returns and pay Federal and State taxes, *The Journal* presents herewith detailed provisions of the tax laws especially affecting physicians, with suggestions as to procedure, based on authoritative information obtained from Federal and State tax officials.

FEDERAL INCOME TAX

COLLECTORS of Internal Revenue in Ohio have mailed to all taxpayers of record, blanks for making Federal Income Tax returns for the calendar year 1940.

These blanks, properly filled out, must be filed with the collector of the district in which the taxpayer resides, on or before March 15, 1941.

A physician who has been called to active military duty should file his income tax return in the office of the Collector of Internal Revenue of the district in which he was a legal resident immediately prior to his entrance into active service.

Any physician required to make a return, but who fails to receive an income tax blank, should apply to the Collector of Internal Revenue for his district.

Internal revenue districts of Ohio, together with the name and address of the collector, and the counties comprising each district, follow:

For the Columbus District (Ohio 11th) Collector of Internal Revenue Harry F. Busey, Federal Building, Water and Gay Sts., Columbus, Ohio; comprising the following counties:

Adams, Athens, Coshocton, Delaware, Fairfield, Franklin, Gallia, Guernsey, Hocking, Jackson, Knox, Lawrence, Licking, Madison, Marion, Meigs, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Pike, Ross, Scioto, Union, Vinton and Washington.

For the Cleveland District (Ohio 18th) Collector of Internal Revenue Frank F. Gentsch, 262 Federal Building, Cleveland, Ohio; comprising the following counties:

Ashland, Ashtabula, Belmont, Carroll, Columbiana, Cuyahoga, Geauga, Harrison, Holmes, Jefferson, Lake, Lorain, Mahoning, Medina, Monroe, Portage, Richland, Stark, Summit, Trumbull, Tuscarawas and Wayne.

For the Cincinnati District (Ohio 1st) Collector of Internal Revenue Thomas J. Connor, Customs Building, Cincinnati, Ohio; comprising the following counties:

Brown, Butler, Clark, Clermont, Clinton, Fayette, Greene, Hamilton, Highland, Miami, Montgomery, Preble and Warren.

For the Toledo District (Ohio 10th) Acting

Collector of Internal Revenue, Toledo, Ohio; comprising the following counties:

Allen, Auglaize, Champaign, Crawford, Darke, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Logan, Lucas, Mercer, Ottawa, Paulding, Putnam, Sandusky, Seneca, Shelby, Van Wert, Williams, Wood and Wyandot.

Any taxpayer can obtain assistance in filling out his income tax return at the various district officers of internal revenue. Between now and March 15 field representatives of these offices spend a day or two in most county seats in the state in order to make their services more readily available to taxpayers. Announcement of their coming is usually made in local newspapers.

INFORMATION RETURNS

In addition, every person making payments of salaries, wages, interest, rents, commissions, or other fixed or determinable income of $800 or more during the calendar year 1940, to a single person, a partnership, or a fiduciary, or $2,000 or more to a married person, is required to make a return on Forms 1096 and 1099 showing the amount of such payments and the name and address of each recipient. These forms may be obtained from any District Collector of Internal Revenue on request.

Salaries of office assistants and other employes coming under this provision must be reported, also office rent, unless paid to a corporation.

Such returns covering the calendar year 1940 must be forwarded to the Commissioner of Internal Revenue, Sorting Section, Washington, D. C., in time to be received not later than February 15, 1941.

CHANGES IN REVENUE ACT

During the past year the U. S. Congress enacted a number of important changes in the Revenue Act of 1936 governing income tax. As revised the law states that all single persons with a gross income of $800 or more must file a return. Last year the income tax did not reach below those who had an annual net income of $1,000. The taxable minimum for married persons has been similarly lowered—from a net income of $2,500 to a gross income of $2,000. In computing the tax, exemption for a single person has been reduced from $1,000 to $800 and for a married person, from $2,500 to $2,000. Credit for dependents remains at $400. The 4 per cent base tax rate remains unchanged, but there have been increases in some of the surtax rates. After the total income tax has been figured, 10 per cent of the amount is added for national defense. Another change in the Act is that it will not now be necessary to file returns in duplicate.

FORMS TO BE USED

Physicians and other professional men, are required to use Form 1040 in submitting returns, regardless of the amount of net income. The sole exception is a physician not in private practice, receiving a salary, whose net income is less than $5,000. In such cases, Form 1040-A should be used.

Following is a detailed analysis of the procedure physicians should follow in filling out blanks for their 1940 income, and an example of how computations of the tax should be made:

Every physician whose gross income for 1940 was $800 or more, if single, and $2,000 or more, if married, must file an income tax return on or before March 15, 1941.

All groups, joint ventures and other incorporated organizations must file returns as partnerships or corporations. Such returns must list the names and addresses of the individuals who would be entitled to share in the net income if distributed and the amount of the distributive share of each individual. The members of such groups or corporations must report their distributive shares as their own income.

In order to expedite checking of returns, and eliminate the possibility of unnecessary correspondence or investigations, physicians are urged to fill out all schedules in their returns.

GROSS INCOME

Gross income includes gains, profits and income derived from professional services, business activities, salaries, wages, sales, dealing in, or exchange of real or personal property, rents or royalties, dividends and interest, bonuses received as compensation, money collected on old accounts charged off in previous years as "bad debts", and funds received from all other sources.

PERSONAL EXEMPTIONS

If married and living with wife, or the head of a family, for the entire year, an exemption of $2,000 is allowed; if single and not a head of a family, an exemption of $800 is permitted, as credit against net income for the purposes of the normal tax and the surtax.

Credit of $400 is permitted for each dependent under 18 years of age or each physically or mentally handicapped dependent regardless of age. The credit is not allowed in the case of a dependent minor over 18 years of age even if such minor is attending school.

The names and relationships of dependents for whom a credit is taken must be shown on Schedule J, page 4, of the return.

In case of a change during the calendar year of the status of the physician in so far as it affects the personal exemption or credit for dependents, the personal exemption and credit should be apportioned in accordance with the number of months after such a change. Authority for prescribing rules and regulations for such apportionment is given to the Commissioner of Internal Revenue.

A husband and wife living together shall receive but one personal exemption. The amount of such personal exemption is, as previously stated, $2,000. If such husband and wife make separate returns, the personal exemption may be taken by either or divided between them.

ITEMS NOT REPORTABLE AS INCOME

The following items **should not** be included in gross income tax since they are **exempt** to Federal income tax:

Amounts received under a life insurance contract paid by reason of the death of the insured; whether in a single sum or in installments (but if such amounts are held by the insurer under an agreement to pay interest thereon, the interest payments shall be included in gross income).

Amounts received (other than amounts paid by reason of the death of the insured and interest payments on such amounts and other than amounts received as annuities) under a life insurance or endowment contract, but if such amounts (when added to amounts received before the taxable year under such contract) exceed the aggregate premiums or consideration paid (whether or not paid during the taxable year) then the excess shall be included in gross income. Amounts received as an annuity under an annuity or endowment contract shall be included in gross income; except that there shall be excluded from gross income the excess of the amount received in the taxable year over an amount equal to 3 per cent of the aggregate premiums or consideration paid for such annuity (whether or not paid during such year), until the aggregate amount excluded from gross income equals the aggregate premiums or consideration paid for such annuity.

Gifts (not made as a consideration for service rendered) and money and property acquired by bequest, devise, or inheritance (but the income derived from such property is taxable and must be reported).

Interest upon (1) the obligations of a State, Territory, or any political subdivision thereof, or the District of Columbia, or United States possessions; or (2) obligations issued under the provisions of the Federal Farm Loan Act or under such act as amended; or (3) the obligations of the United States; or (4) obligations of instrumentalities of the United States (other than obligations issued under Federal Farm Loan Act or under such Act as amended), such as Federal Farm Mortgage Corporation bonds, Home Owners' Loan Corporation bonds, etc. The interest on United States Savings Bonds and Treasury Bonds, owned in excess of $5,000, and on obligations of instrumentalities of the United States (other than obligations issued under Federal Farm Loan Act or under such Act as amended) is subject to surtax if the surtax net income is over $4,000.

Amounts received through accident or health insurance or under workmen's compensation acts, as compensation for personal injuries or sickness plus the amount of any damages received, whether by suit or agreement, on account of such injuries or sickness.

Amounts received as earned income from sources without the United States (except amounts paid by the United States or any agency thereof) by an individual citizen of the United States who is a bona fide nonresident for more than six months during the taxable year. The taxpayer in such a case may not deduct from his gross income any amount properly allocable to or chargeable against the amount so excluded from his gross income.

DEDUCTIBLE ITEMS

In computing net income, the following items may be deducted by a physician from gross income:

Office Rental—If a physician pays rent to another person for office space, he may deduct such amount. If he owns his own home and maintains an office in it, he **can not** claim deduction for office rent. However, he is entitled to claim depreciation on that portion of the property occupied as an office.

Automobile—The cost of repair and upkeep of an automobile, including gasoline and oil, used in professional visits may be deducted. That part of the salary paid to a chauffeur and attributable to time spent in driving his employer on professional calls, may be deducted. Sums spent for taxi hire, car fare, etc., while on professional calls, may be deducted.

Loss on an automobile used in professional business through depreciation may be deducted. The depreciation which should be deducted annually is figured by dividing the cost price of the machine by the number of years of its usefulness. If a physician has one automobile which is used exclusively in professional business, he may deduct the full depreciation each year. If the machine is used only partly in professional business the deductible depreciation should be computed on the basis of the amount of time the car is used for professional purposes. If a physician possesses two cars, each of which is used partly in professional business, the deductible depreciation on each car should be computed on the basis of the amount of time each car is used for professional purposes. In other words, if an automobile is used only partly for business purposes, depreciation may be deducted only on a proportionate part thereof, the amount of depreciation depending on the amount of time the machine is used in professional business.

It is suggested that physicians be prepared to substantiate claims for deductions from gross income for professional use of automobiles in case income tax officials should call on them for written records to show the mileage traveled by them in connection with professional practice, or to prove just what part of their automobile maintenance expense was a professional expense, and therefore deductible.

Professional Dues—Dues paid to professional associations to which, in the interest of his profession, the physician belongs, may be deducted. Expenses incurred in taking graduate courses have been held **not** to be deductible.

Traveling Expenses—Traveling expenses necessarily incurred by a physician on professional calls and in attending medical conventions for a professional purpose are deductible from gross income.

Salaries and Wages—Deductions are permitted for the salaries or wages of nurses, laboratory workers, technicians, assistants, stenographers or other clerical workers in a physician's office so long as their duties are connected with professional work; also for wages paid maids, janitors, etc., for services rendered in connection with professional practice.

Medicines, Supplies, etc.—Cost of medicines used in the office to treat patients, medicine dispensed, bandages, laboratory materials, chemicals, and other supplies "consumed in the using" and necessary to operate the office may be deducted.

Equipment, Furniture, Library, etc.—Cost of surgical instruments and laboratory appliances of more or less permanent value may not be deducted but a percentage of the purchase price may be deducted annually under a depreciation account. The same rule applies to office furniture and books purchased for the physician's office library. If improvement to offset obsolescence and wear and tear or injury has been made and deduction for the cost claimed elsewhere in the return, claim should not be made for depreciation.

General Office Expenses—The cost of telephone, telegrams, heat, light, water, etc., used in professional service is deductible. Physicians who keep current magazine and newspapers in their waiting rooms for the benefit of their patients, may deduct this item as a business expense. The cost of professional journals for the physician's own use is also a deductible item.

Debts—If the physician's books are kept according to the "Cash Receipts and Disbursements" system, he may not charge off any unpaid debt because he is then only reporting as gross income those accounts which have proved to be good. Bad accounts have not been reported and are therefore not deductible.

If books are kept on an "Accrual Basis" (where expense is actually incurred and payable even though not yet paid, or income earned although not yet collected) it is permissible to charge off all debts which have been definitely ascertained to be worthless during the fiscal year covered by the report.

The physician using this latter system must be careful to include in gross income bad debts which have been charged off in previous years but collected during the calendar year for which the return is filed.

Taxes and Licenses—All state and county taxes, except those assessed against local benefits of a kind tending to increase the value of the property assessed and those imposed upon the taxpayer upon his interest as shareholders of a corporation which are paid by the corporation without reimbursement from the taxpayer, are deductible.

Sales tax payments may be deducted. A reasonable allowance will be permitted in proportion to the physician's income. Should the claimed exemption appear too large, however, the burden of proof falls upon the taxpayer, and **he may be called upon to produce purchase receipts to substantiate his claim.** Sales tax coupons **are not** considered sufficient evidence.

All Federal taxes except income, war-profit and excess-profit taxes are deductible, including Federal excise taxes collected direct from the consumer or purchaser.

Federal Old Age Benefits and Unemployment Compensation taxes paid by employers under the Social Security Act are proper deductions in making income tax returns. Such taxes are deductible on returns for the taxable year in which they are accrued or paid, depending upon the method of accounting employed by the taxpayer. However, Federal Old Age Benefits payroll deductions from employees' wages are not proper deductions from individual Federal income tax returns. The reason for this latter distinction is that the individual employee at a future date will have returned to him in the form of pensions the money which is deducted from his current wages.

The Ohio Gasoline Tax is deductible to the extent of three cents per gallon. If a physician has already deducted the cost of gasoline used in making professional calls as automobile expense, he can not of course make an additional deduction of three cents per gallon for gasoline so used. However, he may deduct that amount on gasoline purchased for other than professional use.

All license fees which the physician is required to pay are deductible, including the narcotic tax, automobile license tag fee, local occupational taxes, taxes on club dues, etc.

Interest—Amounts paid out as interest upon indebtedness (except interest paid to carry non-taxable securities) are deductible.

Losses by Fire and Theft—Loss of and damage to a physician's equipment by fire, theft, or other cause, not compensable by insurance or otherwise recoverable, may be computed as a business expense, and is deductible, provided evidence of such loss or damage can be produced. Such loss or damage is deductible, however, only to the extent to which it has not been made good by repair and the cost of the repair is claimed as a deduction.

Insurance Premiums—Premiums paid for insurance against professional losses are deductible. This includes insurance against damages for alleged malpractice, against liability for injuries to a physician's automobile while in use for professional purposes, and against loss from theft of professional equipment, and damage to or loss of professional equipment by fire or otherwise. Premiums paid on life insurance are not deductible.

Legal Expenses—Expense incurred in the defense of a suit for alleged malpractice is deductible as business expense. However, expense incurred in the defense of a criminal action is not deductible.

Contributions, Gifts, etc.—It is permissible to deduct from gross income contributions made to charitable, religious, educational and scientific organizations, no substantial part of the activities of which is carrying on propaganda, or otherwise attempting to influence legislation, to an aggregate amount not to exceed 15 per cent of the net income, exclusive of such contributions.

EARNED INCOME CREDIT

For purposes of the normal tax, an earned income credit is allowed by means of a deduction from net income of an amount equal to 10 per cent of the earned net income. If the taxpayer's net income is not more than $3,000, his entire net income is considered to be earned net income. If his net income is more than $3,000, his earned net income shall not be considered less than $3,000 but in no case shall the earned net income be considered more than $14,000.

NORMAL TAX RATE

The normal tax rate on 1940 income is 4 per cent on all net income in excess of exemptions and credits.

SURTAX RATES

In addition to the normal tax, a surtax is levied on surtax net income, that is, net income less the personal exemption and the credit for dependents, as follows:

Amount of surtax net income	Rate percent	Total surtax
$ 0 to $ 4,000		
4,000 to 6,000	4	$ 80
6,000 to 8,000	6	200
8,000 to 10,000	8	360
10,000 to 12,000	10	560
12,000 to 14,000	12	800
14,000 to 16,000	15	1,100
16,000 to 18,000	18	1,460
18,000 to 20,000	21	1,880
20,000 to 22,000	24	2,360
22,000 to 26,000	27	3,440
26,000 to 32,000	30	5,240
32,000 to 38,000	33	7,220
38,000 to 44,000	36	9,380
44,000 to 50,000	40	11,780
50,000 to 60,000	44	16,180
60,000 to 70,000	47	20,880
70,000 to 80,000	50	25,880
80,000 to 90,000	53	31,180
90,000 to 100,000	56	36,780
100,000 to 150,000	58	65,780
150,000 to 200,000	60	95,780
200,000 to 250,000	62	126,780
250,000 to 300,000	64	158,780
300,000 to 400,000	66	224,780
400,000 to 500,000	68	292,780
500,000 to 750,000	70	467,780
750,000 to 1,000,000	72	647,780
1,000,000 to 2,000,000	73	1,377,780
2,000,000 to 5,000,000	74	3,597,780
5,000,000 up	75	

HOW COMPUTATIONS ARE MADE

An example of how computations are made is given here for the information of physicians. The figures used in the following tabulations may appear out of proportion to the actual income of the average physician during 1940. However, they are used merely to illustrate how the normal and surtax rates should be applied.

If a married physician with no dependents and who rents his home and office had a gross income during 1940 of $15,000 and ordinary expenses, he should submit the following data on his return and compute his tax as follows:

Gross Income

Income from professional services		$12,000.00
Income from other sources:		
Rent from apartment	$1,500.00	
Taxable interest, dividends	1,500.00	
	$3,000.00	3,000.00
Gross income		$15,000.00

Deductions

Depreciation of office furniture, etc.	$ 400.00
Salaries and wages for office help	1,500.00
Telephone, heat, light, etc.	400.00

Automobile cost and depreciation	800.00	
Drugs, bandages, medicines, etc.	2,500.00	
Traveling expenses to medical meetings	300.00	
Office rent	800.00	
Dues, insurance	200.00	
Miscellaneous expense	100.00	
Business expenses	$7,000.00	
State sales tax	75.00	
Old age benefit tax	15.00	
Gasoline tax	10.00	
Taxes on apartment	400.00	
Interest on mortgage, overhead, etc.	300.00	
Total deductible expenses		$ 7,800.00
Net income (gross income, less deductible expenses)		$ 7,200.00

Computations

Surtax net income (net income less personal exemption $7,200.00 less $2,000.00)	$ 5,200.00
Earned net income (earned income less business expenses, $12,000.00 less $7,000.00)	$ 5,000.00
Earned income credit (10% of earned net income, $5,000.00)	$ 500.00
Income subject to normal tax (net income less personal exemptions and earned income credit; $7,200.00 less $2,000.00 and $500.00)	$ 4,700.00
Normal tax (4% of $4,700.00)	188.00
Income subject to surtax (surtax net income in excess of $4,000.00)	$ 1,200.00
Surtax (4% of $1,200.00)	$ 48.00
Total tax (normal tax plus surtax)	$ 236.00
Defense tax (10% of total tax)	$ 23.60
Total income and defense taxes	$ 259.60

If the above return had been computed on the basis of the personal exemptions and tax rates in effect a year ago, the total tax would have been $196.00.

EXTENSION OF TIME FOR FILING RETURNS

Collectors of Internal Revenue are authorized to grant reasonable extensions of time for filing income tax returns. Applications for extensions of time should be addressed to the collector for the district in which the physician files his return, and must contain a full recital of the causes for the delay. Except in the cases of taxpayers who are abroad, no extension for filing income tax returns may be granted for more than six months.

OHIO PERSONAL PROPERTY TAX

RETURNS under the Ohio Personal Property Tax Law must be made between February 15 and March 31, annually.

All tangible and intangible personal property (not real property) in possession of a physician on January 1, 1941, which is subject to taxation under the Ohio law, should be listed on the return which should be filed with the county auditor between those dates. Form 910 is used by individuals and partnerships, and Form 930 by corporations.

Such returns should be made in duplicate. The so-called intangible tax statutes are intricate and complicated so each physician having taxable personal property for listing should obtain competent advice in case of doubt as to the meaning of any of the provisions of the law.

One of the complicated provisions of the tax law is that involving the listing of credits which are taxable at 3 mills on the dollar and which involves the computation of accounts receivable.

As defined in Section 5327 of the law, credits "mean the excess of the sum of all current accounts receivable and prepaid items used in business when added together estimating every such account and item at its true value in money, over and above the sum of current accounts payable of the business, other than taxes and assessments.

The same section states that "current accounts include items receivable or payable on demand or within one year from the date of inception, however evidenced".

As the first step in making his return under the section relating to credits, a physician should estimate by his best judgment the **Actual Value** of his current accounts receivable—the amount that can probably be collected.

In listing his current accounts receivable, the physician should note after each account what he considers the value of the account. If he believes the account can be collected in full, it should be listed at its full face value. Otherwise, it should be listed at 75%, 50%, 25%, 10%, etc., of its full face value, or of "no value" in case that is considered the "actual value" of the account. The total of these estimates is the total to be entered as "current accounts receivable" and used in computing credits.

This procedure permits the physician to charge off bad debts since in his 1940 return he would be permitted to return as of "no value" accounts receivable which he listed in 1939 but no part of which was collected during the past year. Moreover, it permits a physician to depreciate the actual value of accounts returned in 1939 but which have decreased in actual value during the past year.

OLD AGE BENEFITS TAX

The Old Age Benefits Tax is payable by every physician who employs one or more persons in his office. It amounts to one per cent on the first $3,000 of each employee's wage paid by the employer and a like amount deducted from the wages of each employee. The tax return and informational return, combined in one report, Form SS-1-A, is to be filed quarterly. The tax must be paid and the return filed prior to April 30, for the months of January, February and March, 1941, in the office of the District Collector of Internal Revenue.

UNEMPLOYMENT COMPENSATION TAX

Under the Ohio Unemployment Compensation Law, physicians who employ three or more persons must file an "Employer's Contribution, Form UCO-2-e, Report," quarterly with the Ohio Bureau of Unemployment Compensation, Columbus. Report for the period of October 1 to December 31, 1940, was due January 31. The tax, which must accompany the return, amounts to 2.7 per cent of the quarterly payroll.

Employers of eight or more persons, under the Federal Unemployment Compensation Law, must have filed with the District Collector of Internal Revenue on Form No. 940, prior to January 31, 1941, a report of wages paid during 1940. The tax is 3 per cent, less a credit of the amount paid to the Ohio Bureau of Unemployment Compensation. In other words, 90 per cent of the Unemployment Compensation Tax of employers of eight or more persons will be paid to the State and 10 per cent to the Federal Government.

OHIO USE TAX

The Ohio Use Tax Law, passed in 1936 supplementing the Retail Sales Tax Law, imposes a tax on the same basis as the sales tax, on purchases made outside the state. Its purpose is to protect Ohio merchants from discrimination. Many out-of-state firms have made arrangements with the State Tax Commission to add the amount of the tax to invoices covering purchases by Ohio consumers, collecting the tax and paying it directly to the Commission. **However, if a physician purchases drugs or supplies from an out-of-state firm which has not made such an arrangement with the Tax Commission, he is required to report such purchases to the Tax Commission and pay the tax. Returns must be filed with the Commission by April 15, for purchases during the period January 1 to March 31, 1941, and quarterly thereafter.**

Cupid Marches On

Recent marriages of Ohio physicians include the following: Miss Virginia Marie Schiller and Dr. John E. Allgood, Petersburg; Miss Dorothy Ruth Newton and Dr. Wilfred Earl Allyn, Jr., Cleveland; Miss Marian Miller, Cleveland, and Dr. Robert D. Berkebile, Memphis, Tenn.; Miss Eleanor Hubbard, Ashtabula, and Dr. Shepard A. Burroughs, Cleveland; Miss Laura Campbell, Paw Paw, Michigan, and Dr. K. O. Kennedy, Columbus; Miss Norma Eileen Schuesselin, Piqua, and Dr. Conrad K. Clippinger, Dayton; Miss Carol Hoesman, Woodville, and Dr. Gilbert D. Keil, Toledo; Miss Anna Katherine Roche, Denver, Colorado, and Dr. Clarence W. McNamara, Toledo; Miss Marjorie Jane Flynn, Kent, and Dr. Frank L. Meany, Lakewood; Miss Mary Louise Shaughnessy, St. Louis, Mo., and Dr. Robert W. Stevens, Newark; Miss Jeanne Darnell, Marion, and Dr. John K. Taggart, Cincinnati; Miss Dorothy Sutherin and Dr. Robert Dickey, Cleveland; Miss Eloise Frances Kellogg, Brooklyn, N. Y., and Dr. Boyd W. Travis, Bluffton; Miss Florence Edith Hagedorn and Dr. Robert H. Wahl, Dayton; Miss Martha Bole and Dr. Graham T. Webster, Cleveland; Miss Elizabeth Gross, Lancaster, Pa., and Dr. Harold A. Robinson, Elyria; Miss Hanna Coyle, Washington, Pa., and Dr. R. P. Scott, Norwalk; Miss Frances J. Wildermuth, Columbus, and Dr. Morris Martin, Springfield; Miss Alice Virginia Barker and Dr. Robert E. Holmberg, Cleveland; Miss Martha Prillaman and Dr. Bernard H. Nichols, Cleveland; Miss Josephine M. Thompson and Dr. James B. Massengill, Columbus; Miss Jean Elinor Speers, Cambridge, and Dr. John R. Seesholtz, Toledo; Dr. Alice V. Barker and Dr. Robert E. Holmberg, Cleveland; Miss Hortense Wasserman, Cleveland, and Dr. David N. Farber, New York City.

Dr. Paul N. Leech Dead

Paul N. Leech, Ph.D., Chicago, Ill., Director of the Division of Foods, Drugs and Physical Therapy of the American Medical Association, died suddenly January 14, following a cerebral hemorrhage. He was 52 years old. A native of Oxford, Ohio, Dr. Leech received his A.B. degree at Miami University in 1910; and the degree of master of science from the University of Chicago in 1911 and the Ph.D. in 1913. He joined the staff of the A.M.A. as a chemist in 1913, became director of the chemical laboratory in 1923, and in 1932, following the death of Prof. W. A. Puckner, became Secretary of the Council on Pharmacy and Chemistry. He was a member of Sigma Xi and an honorary member of Phi Beta Kappa. Dr. Leech was known by many Ohio physicians. He was a brother-in-law of Dr. Earl H. Baxter, Columbus.

Do You Know - - -

Commodore Louis D. Beaumont, formerly of Cleveland, now residing in Florida, recently gave $8,500 to Western Reserve University for the purpose of continuing the research in hypertension being carried on by Dr. Harry Goldblatt, professor and associate director of the Institute of Pathology. Commodore Beaumont's grants for this research since 1934-35 amount to $48,000.

* * *

Employers who continue to pay employees while they are engaged in active military or naval service of the United States of America, will not be required to include the wages paid such employees in payroll reports to the State Industrial Commission, according to a resolution adopted by the Commission November 14, 1940.

* * *

Dr. Kenneth C. McCarthy, Toledo anesthetist, has joined the staff of the American Hospital in England, an institution financed by the Allied Relief Fund for war sufferers. He has volunteered for six months' service.

* * *

Captain Harry Armstrong, Army Medical Corps, formerly stationed at Wright Field, Dayton, was one of the recipients of the Collier Trophy, awarded annually by the National Aeronautic Association for accomplishment in aviation. Dr. Armstrong has done outstanding research in the field of aviation medicine.

* * *

It has been estimated that approximately 140,000 of the 6,000,000 men examined for Selective Service will be rejected because of tuberculosis.

* * *

According to preliminary returns from the U. S. Census of Manufacturers for 1939, the value at the factory of surgical instruments and parts made that year was $7,160,692. Surgical supplies and equipment, and orthopedic appliances were valued at $71,679,980 and X-ray and therapeutic apparatus and electronic tubes had a factory value of $17,886,322.

* * *

Fellows of the American College of Surgeons, other members of the medical profession, and persons interested in the institutional care of the sick and injured are invited to attend the 1941 Sectional Meetings of the College, one of which will be held at the Hotel William Penn, Pittsburgh, March 17-19.

* * *

The Spring Clinic Meeting of the Cleveland Dental Society will be held at the Hotel Statler, Cleveland, May 5-7.

The International College of Surgeons will hold its Fifth International Assembly in Mexico City, August 10-14, in response to an invitation from the Mexican Government.

* * *

The American Association for the Study of Goiter again offers the Van Meter Prize Award of $300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. Rules of the contest can be obtained by writing the corresponding secretary, Dr. W. Blair Mosser, 133 Biddle St., Kane, Pa., to whom competing essays must be submitted not later than April 1.

* * *

A copy of the report of the First Annual Medical Meeting of the National Foundation for Infantile Paralysis, held at New York, November 7-8, 1940, can be obtained by writing the Foundation at 120 Broadway, New York City. Included are reports of committees on virus research, chemotherapy, studies of immunity, investigations of after effects, surgical treatment, epidemiology and educational activities.

* * *

The U. S. Public Health Service announces the formation of a new division of chemotherapy in the National Institute of Health, under the direction of Dr. William J. Sebrell, Jr. The new unit will be concerned with research on sulfanilamide products, new synthetic drugs with antimalarial properties to make the United States independent of the Dutch East Indies supply of quinine, new synthetic drugs to supplement the supplies of opiates and studies relating to aging and nutrition.

* * *

The West Australian parliament recently passed a bill permitting qualified alien physicians to practice in certain country districts inadequately supplied with medical service. Sixteen centers in West Australia are said to be without physicians, owing to enlistments in the army.

* * *

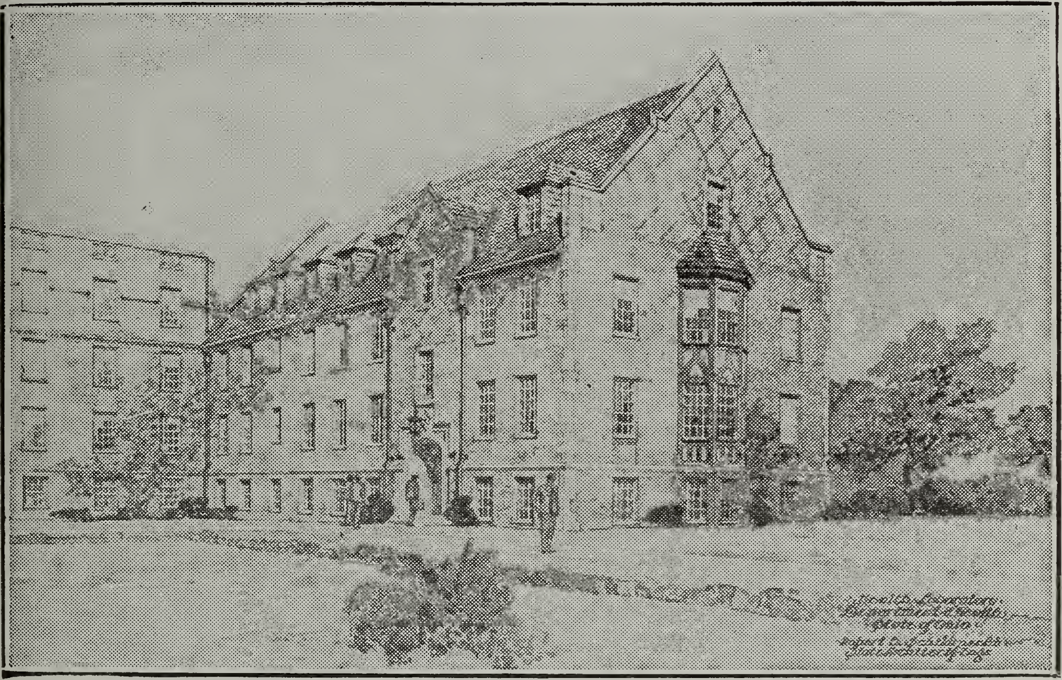
Dr. Newell Patterson, who was the oldest living graduate of the Medical College of Ohio, Cincinnati, died December 30, at his home in East St. Louis, Ill. He was 102 years old.

* * *

At the Second Annual Meeting of the Ohio Orthopedic and Surgical Appliance Association, December 15, in Columbus, Arthur W. Guilford, of G. A. Guilford and Sons, Cleveland, was elected president for a second term. C. L. Jurgens of the C. L. Jurgens Co., Cincinnati, was elected secretary-treasurer, replacing Samuel H. Bomcheck of the Cleveland Orthopedic Company.

Work To Be Started Soon on New State Health Department Laboratory on Campus at Ohio State University

CONSTRUCTION will begin in the near future on the new four-floor brick building which will house the laboratories of the State Department of Health on the campus of Ohio State University. Bids were opened in the office of the State Architect and Engineer recently, and contracts, totaling about $65,000 were let for the building, an architect's sketch of which is produced below.



Many distinctive features designed to facilitate laboratory procedures and to incorporate modern methods to the fullest possible extent will be embodied in the new structure, according to Dr. R. H. Markwith, State Director of Health. Occupation of the new quarters is anticipated by early Fall of this year. The state laboratories are now housed in a temporary location in Columbus as a result of the razing, several months ago, of the old laboratory building on the campus.

The new building may eventually become one wing of a proposed U-shaped edifice to be the permanent home of the State Health Department. As east wing of the three-section unit it will face W. Tenth Ave. in the rear of the University Hospital. Central portion of the proposed "U" structure would be the location of offices of the department and additional laboratory space, and the west wing will house a lecture hall or auditorium. It is planned to delay requests for the latter two sections for the time being, Dr. Markwith said, because of the unusually high cost of construction at present.

Among the advantages of the idea of placing facilities of the health department on the university campus, the Director explained, will be the possibilities of closer relationship with the College of Medicine. It is intended eventually to work out a full plan of cooperation so that staff members of both institutions, such as laboratory technicians, serologists, and biochemists, may work closely with each other, and the health department laboratories may furnish the medical school with a full line of laboratory and clinical specimens.

Health department officials studied other laboratories throughout the country to become familiar with the most modern type of equipment before plans for the Columbus building were drawn up, Dr. Markwith said. As a consequence, such innovations as small individual refrigerators and a forced-air heating and ventilation system with separate controls for each room to keep temperature constant will be employed. Technicians will be seated on correct-posture metal chairs instead of high bookkeepers' stools, as previously was the case.

According to specifications revealed by State Architect Robert Schildknecht, the structure will be 42 feet wide and 80 feet long, with a frame of reinforced concrete. Its architecture will be the English type, to conform to other buildings recently erected on the campus, and it will be finished in variegated red brick trimmed with stone. The roof will be slate.

As an evidence of taking greatest advantage of space limitations and architectural style, Dr. Markwith points to the fact that the fourth-floor or attic quarters under the gables will be used for the animal house.

Also as an economy measure, space has been provided for the storage of 500 gallons of distilled water, thus relieving the load on the distillery during periods of heavy demand.

Movable steel partitions will make for maximum flexibility of the floor plan inside the building. These will permit quick changes to accommodate emergency situations, Dr. Markwith said.

All utility facilities such as pipes for water, gas, and compressed air and electric conduits will be exposed overhead so that quickest possible repairs may be made.

Little expansion in personnel is anticipated with the occupancy of the new building, according to Dr. Markwith, because a maximum force is at work now to meet the vastly increased requirements for serological tests for selective service. However, virtually all of the equipment which will be placed in the building will be new.

Dr. Markwith explained that it is his hope that the laboratory will eventually become an exchange center or clearing house for rare sera and other materials not frequently needed. In this way, he said, it can be of great value to practicing physicians and will assist in keying communicable disease control to modern circumstances of air travel and other forms of rapid communication.

Editor Speaks on Enabling Act

Recent addresses on the Enabling Act by Dr. Jonathan Forman, editor of *The Ohio State Medical Journal*, include the following: Optimist Club, Columbus, Jan. 6; Woman's Auxiliary to the Hancock County Medical Society, Findlay, Jan. 9; Kiwanis Club, Circleville, Jan. 20; Kiwanis Club, Lima, and the Woman's Auxiliary to the Allen County Academy of Medicine, Lima, Jan. 27.

Cincinnati—Dr. Wm. P. Gillespie has been reelected president of the Cincinnati Obstetrical Society. Other officers are: Dr. Edward Friedman, vice-president, and Dr. Carroll J. Fairo, secretary.

Rules on Aid To Children

Attorney General Thomas J. Herbert recently issued an opinion, No. 3228, with regard to appropriations by county commissioners for aid, including surgical, medical and orthopedic care, to neglected and delinquent children other than those entitled to aid under the Aid to Dependent Children Law. Syllabus of the opinion reads as follows:

(1) Having due regard for other expenditures made mandatory by statute, each year the county commissioners are under duty to appropriate sufficient money to provide for the care, maintenance, education and support of neglected, dependent and delinquent children of the county, other than children entitled to aid under the Aid to Dependent Children Law, Sec. 1359-31, et seq., General Code, and for necessary orthopedic, surgical and medical treatment and special care as may be authorized by the Juvenile Court for any neglected, dependent or delinquent children of the county, as required by the Juvenile Court Code (Sec. 1639-1 to 1639-62, inclusive, G. C.). Upon presentation of specifically itemized vouchers, certified to by the Judge of the Juvenile Court, to the county auditor, he shall draw his warrant on the county treasury in conformity with such appropriations. (2) Under the provisions of Section 284, et seq., G. C., when a report of examination by the Bureau of Inspection and Supervision of Public Offices, sets forth that public money due a municipality from a county has not been collected, said Bureau is authorized and required to render findings for recovery of the same against the county and in favor of the municipality.

Pathologists Met in Cleveland

The Ohio Society of Pathologists held its regular mid-winter meeting at the Institute of Pathology, Western Reserve University, Cleveland, January 18. Dr. Howard T. Karsner and his associates were the hosts. They presented the following very interesting program:

Part I. "Paget's Disease of the Nipple", Dr. Karsner; "Juxta-glomerular Apparatus", Dr. Francis Bayless; "Experimental Observations of Hypertension Associated with Unilateral Renal Disease", Dr. Harry Goldblatt.

Part II. Seminar of the clinical histories and histopathology of selected cases from Cleveland hospitals.

Dinner was served following a short business meeting. Officers of the society are: Dr. Wm. M. German, Cincinnati, president; Dr. Allen Graham, Cleveland, vice-president; Dr. A. H. Schade, Toledo, secretary.

State Medical Board Organizes for the Year and Grants Licenses to 47 Doctors of Medicine at January Meeting

LICENSES to practice medicine and surgery in Ohio were granted 47 medical school graduates, who passed the December examinations, at a meeting of the State Medical Board at Columbus on January 7.

The Board also granted certificates to six osteopaths, two chiropractors, 12 mechanotherapists, nine cosmetic therapists, eight chiropodists and 12 masseurs.

The license of Dr. Matthew G. Platt, Newark, to practice medicine and surgery, was revoked. He was charged with gross immorality and violation of the Federal Narcotic Laws.

The following officers were elected by the Board for the ensuing year: Dr. Roy C. Hunter, Wapakoneta, president; Dr. C. W. Waggoner, Toledo, vice-president; Dr. Ralph B. Taylor, treasurer. Other members of the Board are: Dr. J. H. J. Upham, Columbus; Dr. William M. Hoyt, Hillsboro; Dr. Thomas H. George, Cleveland; and Dr. Claude V. Davis, Pennsville. Dr. H. M. Platter, Columbus, was reappointed secretary of the Board, and Professor S. E. Razor and Miss Clara F. Brouse, were reappointed entrance examiner and chief nurse examiner, respectively.

The highest grade in the examinations to practice medicine and surgery was made by Dr. G. H. Ruggy, Columbus, a graduate of the University of Chicago, whose grade was 89.1 per cent. Dr. J. G. Strance, Cincinnati, a graduate of Hahnemann Medical College, Philadelphia, was second with 85.9 per cent, and Dr. G. H. Brown, Cincinnati, a graduate of Northwestern University, third with 85.3 per cent.

Those granted medical and surgical examinations following examination were:

Ruth P. Sprinkle, Cincinnati, University of Cincinnati; William E. Storer, Middletown, George Washington University; Charles E. Bolinger, Cleveland, Pattison Fulton, Cincinnati, Charles W. Hoyt, Cincinnati, Carl A. Layrer, Hamilton, Anthony J. Minelli, Cleveland, John G. Strance, Cincinnati, Thomas W. Tucker, Dayton, Hahnemann Medical College; Nicholas H. Holmes, Chillicothe, Harvard Medical School; LeRoy C. Rule, Cincinnati, Johns Hopkins University; Louis F. Lombardi, Akron, Loyola University.

Wilfred E. Allyn, Jr., Cleveland, Charles W. Marsh, Jr., Cleveland, Richard H. Stahl, Akron, New York Medical College; George H. Brown, Cincinnati, Northwestern University; Edwin S. Pudzinski, Cleveland, St. Louis University; George H. Ruggy, Columbus, University of Chicago; Howard O. Musser, Akron, George B. Perrine, Cincinnati, University of Pennsylvania; Warren S. Kelley, Cleveland, Linda A. Tischer, Cleveland, University of Rochester; Jerome F. Paulson, Cincinnati, University of Wisconsin; Robert T. Rowe, Akron, Yale University.

Carl H. Storey, Cincinnati, McGill University; Abraham Fink, Cincinnati, University of Toronto; Joseph Arday, Cleveland, Aladar Gelehrter, Cleveland, German University of Prague; Alfred Lewin, Columbus, Moses Lowenthal, Cleveland, Hans E. Simmel, Chicago, Illinois, University of Berlin; Edmund Chapdelaine, Toledo, University of Bern; Julius Ohlmann, New York City, Sally Frederick Roos, New York City, University of Freiburg; Fritz Eberstadt, New York City, Theodore Gernsheimer, Cleveland, Hans Guggenheimer, Cleveland, Hans Rubin, Cleveland, Adolf Wolff, Cleveland, University of Heidelberg; Jacob N. Fidelholtz, Canton, University of Lausanne; Siegfried Koppel, Cleveland, University of Munich; Frederick C. Adler, Cleveland, Austin Belai, Omaha, Nebraska, Paul Hofmann, Forest Hills, N. Y., Frederick Kornfeld, Cleveland, Frederich Sternberg, Cleveland, Kurt Tschiassny, Cincinnati, University of Vienna.

Licenses to practice medicine and surgery in Ohio, through reciprocity with other states, were granted by the Board to the following 24 physicians:

Francis Bayless, Cleveland, Indiana University; William B. Bean, Cincinnati, University of Virginia; Edward M. Chester, Berea, University of Iowa; William E. Hall, Massillon, Barnes Medical College; Howard B. Hamilton, Dayton, University of Chicago; Joseph C. Hayward, Worthington, College of Medical Evangelists; Thos. V. Hoagland, Cleveland, State University of Iowa; Rudolph E. Jacobi, Cleveland, Creighton University; Paul V. Joliet, Cleveland, St. Louis University; Herbert H. Johnson, Jr., Cleveland, Stanford University; Theodore R. Mattocks, Marietta, Duke University; Russell V. Milliser, Columbus, Northwestern University; Amedeo C. Naclerio, Cleveland, Marquette University; Nathan C. Norcross, Toledo, Boston University; James F. O'Hara, Canton, Maryland Medical School; George B. Pantera, Toledo, Georgetown University; Benjamin Rappaport, Coshocton, Rush Medical College; Jos. H. Schultz, Massillon, University of Louisville; Albert R. Smith, Columbus, Duke University; Howard C. Stewart, Cleveland Heights, University of Nebraska; Roy E. Stivison, Mansfield, University of Kansas; John W. Taylor, Monclova, College of Medical Evangelists; David J. Tschetter, Canton, University of Chicago; Zale A. Yanof, Toledo, Northwestern University.

Importance of Receiving and Reading Bulletin of Woman's Auxiliary Stressed by President of National Group

By MRS. V. E. HOLCOMBE, CHARLESTON, WEST VIRGINIA
President, Woman's Auxiliary of the A.M.A.

Editor's Note: The Journal hopes to be able to publish from time to time articles of interest to members of the Woman's Auxiliary of the Ohio State Medical Association and potential members of the Auxiliary. The accompanying special article, prepared by Mrs. V. E. Holcombe, Charleston, West Virginia, president of the Woman's Auxiliary of the American Medical Association, reviews some of the objectives and activities of the Auxiliary.

THE nineteenth year of the National Auxiliary is well under way. Ere this, I am sure you have realized that our project for the ensuing year is to increase the circulation of the "Bulletin", our official organ.

In selecting this project for the year, we have done so with the full realization that we have selected a hard one.

Do you want to know more about the Program of the Auxiliary and the working of each of the several Committees?

Do you want to know why we promote the sale of Hygeia? Do you want to know why we feel it our duty and privilege to emphasize a Health Program, encourage a Public Relations and a Legislative Program? Do you want to know what the Auxiliary stands for? Why so many fine intelligent women are giving much of their time to this organization? Why the Doctors themselves encourage the growth and expansion of our activities?

MUST HAVE PUBLICATION

Read the Bulletin, the Auxiliary Digest. Become informed on the whole Program of the Woman's Auxiliary to the American Medical Association and its component Auxiliaries.

An organization without an appropriate and special literature is like a garden without plants. The possibilities for growth are there, but there can be no good fruitage without the planting of seeds and the cultivation of the plants.

There can be no continuation of a garden without a cherishing of seeds and plants, and a re-seeding and re-planting year after year. Only thus does a garden grow.

Little did I realize when I became President of the Auxiliary that I should soon become a mere "sales agent" for our periodical. Yet here I stand before you, ready to present my little sales talk regarding the publication of the Woman's Auxiliary to the American Medical Association. And, in passing, I would have you realize that I am not working my way through college, finishing-school or an N.E.A. correspondence course by stimulating such a circulation. I am working solely and simply in behalf of the Woman's Auxiliary in its efforts to make our organization a conservative force in furthering the programs and ideals of the American Medical Association. In disseminating Medical Auxiliary news and activities, through the Bulletin, to the most remote Auxiliary and member, I shall consider my greatest service. There are two questions which I have often been asked, in this connection. First, "Why do you place so much stress upon the importance of the Bulletin?" Second, "Is it really so all-important that the Bulletin have a large circulation?"

With your kind indulgence, I shall for the next few minutes attempt to point out the purposes behind this drive for a more extensive circulation of the Bulletin.

Everyone recognizes this truth—that progress in any organization is dependent on facts, observations and conclusions communicated by one individual to another, and recorded for future generations; each generation building on the foundation work of former generations. Each set of officers profiting by the experience of their predecessors; ever striving to bring to fruition the visions of pioneer leaders; broadening the path and extending it, always toward the goal of highest organization efficiency. It is these and other factors which I feel must be emphasized, and it is only by constant, almost monotonous, emphasis that we can hope to lift the Bulletin to its rightful place of usefulness in the Auxiliary world.

SUBSCRIPTION IS $1.00

For those of you who possibly may not be entirely up-to-date in this respect, I might just mention the Bulletin is merely the new name which has been given to the publication that was formerly called the News Letter. It is an attractice little booklet, issued quarterly—price $1.00 per year. It is published for the express purpose of furthering our fellowship, and propagating the principles and ideals of our organization. Advancement in any organization is in direct relationship to the improvement of facilities for the exchange and interchange of facts, information, knowledge and truth, and the proper use of those facilities.

There is hardly an organization of any size or significance existing today that does not have a periodical, well supported and subscribed to.

I could list these by the hundreds, but it is a well known fact, which needs no repeating.

In this connection, I might add that the American Medical Association not only publishes its journal, but the health magazine Hygeia, in order to keep its members and the public in general, informed regarding the various developments of medicine. The state societies also have their own local journals, all of which are of the utmost importance to the medical profession. Our Bulletin could be equally important. It is with this truth in mind that it is published. Through it new ideas and new knowledge are transmitted to the various members of our Auxiliary. Many valuable ideas would die with the originator were it not for the aid given by the Bulletin in providing them with an audience.

CAREFULLY SUPERVISED

A competent editorial leadership directs and guides its policies. Authoritative writers, and otherwise discerning observers present, from time to time, a sweeping panorama of events of interest and importance.

There are so many worthwhile happenings in the medical world of today, which are interesting to know, even if they are never used. With the questionable and critical attitudes toward the medical profession which have arisen in the past few years, it is important that we "pool our assets" and present a united front to adverse forces and influences.

Dr. Parran, chief of the U. S. Health Service says that last year was the "healthiest" year in the history of the United States; viz: the death rate was lowest per capita. In spite of all "drives" and scares and tales of neglect, the United States is the healthiest country in the civilized world.

Even the most bureaucratic-minded and garrulous must give the medical men of the world the credit for this condition. Increasing the span of life from 37 years to 65 years in less than a century was not accomplished by law-makers.

SHOULD KNOW THE FACTS

The wives of medical men need to know such facts as these.

With the added responsibility of the privilege of voting, women should be versed in the matters on which they vote. Legislation is now pending which will vitally affect the whole outlook of the medical profession. The trend of laymen and lay organizations is serious. Doctors' wives can have an influence on such legislation if they know the facts. They have many avenues of contact where they may influence public opinion toward a fair presentation of the actual facts.

We are pleased that we have the favor of our outstanding medical men in the expansion of the Bulletin. We had a fine article by Dr. Van Etten, president of the American Medical Association, in the Fall issue, and have one from Dr. Lahey, president-elect, for the Winter issue.

The Bulletin is our medium of information. The members should read it because it conveys to them knowledge of what other members are doing. They may read that there are others who have problems, and the way they were solved. A tie of interest and understanding is formed through the channels of information concerning each other.

The Bulletin gives the main facts about the activities in which our organization is engaged, and the progress thereof. It presents the essential features of what is transpiring.

A very small percentage of our membership is reading the Bulletin to date. We are sure that the Auxiliary will be best served by enlarging the list of readers that we are making this our major project of the year. We shall also strive to make each issue better than the last. In order to give more consideration to the publication, we shall make a sound investment, certain to be productive of future gains in every way.

Every member of our Auxiliary should realize her responsibility to our official publication. The power of the Bulletin in your organization is dependent upon whether it is given a place there or not. No instrument of righteousness, however excellent, can have an effect for good on those whom it has no opportunity to touch. There is no magic power in food to nourish those who fail to partake of it. There is no efficiency in a Bulletin that is never read.

CIRCULATION GOAL

The immediate goal of our Auxiliary is to increase the circulation of the Bulletin to include at least one-fourth of our Auxiliary membership. That means that we should have approximately 6,000 readers. It means that your Auxiliary must send at least one-fourth of your membership.

We feel that you and all readers will be amply repaid by having first-hand knowledge of the doings of the finest profession in the world and its Auxiliary. With this information and inspiration we feel that we shall all be more worthy members of the Woman's Auxiliary to the American Medical Association.

Won't you put on an active drive now to reach your quota? Let's get the subscriptions in at once, in order that we may have the news of the administration during the term of the administration.

Contact all of your members and give them the privilege of subscribing. We sincerely believe it will do much to benefit the Woman's Auxiliary.

Send your subscriptions and dollars to Mrs. H. E. Christenberry, Circulation Manager, Highland Drive, Knoxville, Tennessee.

In Memoriam

Clement H. Bockoven, M.D., Verona; Illinois Medical College, Chicago, 1903; aged 67; died January 3. Dr. Bockoven retired three years ago after having practiced in Plymouth, Indiana, for many years. He was a member of the Methodist Church. Surviving are his widow, Dr. Susie M. D. Bockoven, retired physician; a son, Dr. Harold D. Bockoven, Verona; and an adopted daughter.

Malcolm Benton Boone, M.D., Mt. Victory; Rush Medical College, University of Chicago, 1890; aged 74; former member of the Ohio State Medical Association and the American Medical Association; died December 22. Dr. Boone retired a few years ago, after having served his community as a physician and druggist for more than 40 years. He was a former member of the Hardin County board of health and the Mt. Victory board of education. Dr. Boone had been a member of the Larue Masonic Lodge for 50 years. His widow, three daughters and a sister survive.

Wilson Harmon Button, M.D., Hubbard; Western Reserve University School of Medicine, 1885; aged 83; former member of the Ohio State Medical Association and the American Medical Association; died December 12. Dr. Button practiced medicine for 55 years, including five years in Brookfield, two in Parkman and the remainder in Hubbard. He was a former president and member of the Hubbard village council and the board of education, and a past-president of the Kiwanis Club. Dr. Button was a member of the Masonic Order and the I.O.O.F. Surviving are his widow and two sons.

William E. Chambers, M.D., Cleveland Heights; University of Toronto Faculty of Medicine, 1893; aged 73; died December 20. A native of England, Dr. Chambers practiced in Oakwood, Ont., for several years, locating in Cleveland in 1906. For 15 years he was medical referee for the New York Life Insurance Company. Dr. Chambers was a member of the Masonic Order, the Foresters and the British Medical Association. His widow and two sons survive.

Alfred R. Cobbs, M.D., Damascus; Miami Medical College, Cincinnati, 1893; aged 76; member of the Ohio State Medical Association and Fellow of the American Medical Association; died December 26. Dr. Cobbs practiced in Damascus for nearly 48 years. Surviving are his widow; two sons, one of whom is Dr. L. A. Cobbs, Salem; two daughters; a brother and two sisters.

Albert E. Cotes, M.D., Springfield; Ohio Medical University, Columbus, 1900; aged 67; died December 19. Dr. Cotes was secretary-treasurer of the Springfield Cemetery Association for 23 years. He practiced medicine in Clark County 40 years ago for a period of four years. He was a member of the Presbyterian Church and the Masonic Order. His widow, a son and a daughter survive.

Harry Edwin Dwire, M.D., Bucyrus; Georgia College of Eclectic Medicine and Surgery, Atlanta, 1895; aged 71; former member of the Ohio State Medical Association and the American Medical Association and a past-president of the Ohio State Eclectic Medical Association; died January 7. Dr. Dwire opened an office in Bucyrus in 1919 after having served as a captain in the Medical Corps of the U. S. Army during the World War. He had previously practiced in Nevada. Dr. Dwire was a member of the Masonic Order and a charter member of the Bucyrus Country Club. His widow and four daughters survive.

Charles Christian Dreyer, M.D., Toledo; University of Wooster, Medical Department, Cleveland, 1896; aged 71; former member of the Ohio State Medical Association and the American Medical Association; died December 17. Dr. Dreyer was associated with the Toledo health department for 23 years, having served many years as chief of the bureau of medical relief. For seven years after graduation he practiced in Pemberville, locating in Toledo in 1903. His son, Dr. Carl A. Dreyer, Toledo, and two daughters survive.

Henry Bernard Freiberg, M.D., Cincinnati; University of Cincinnati College of Medicine, 1918; aged 46; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; diplomate of the American Board of Urology, Inc.; member of the American Urological Association; died January 22. A former secretary and trustee of the Cincinnati Academy of Medicine, and for many years a member of the House of Delegates of the State Association, Dr. Freiberg was an enthusiastic and active worker for organized medicine. He was chairman of the Banquet Committee at the Annual Meeting of the State Association held in Cincinnati last May. Dr. Freiberg had practiced in Cincinnati for 20 years, and was a member of the staffs of General and Children's Hospitals, attending urologist at Jewish Hospital and Tuberculosis Branch Hospital and consultant at Christ Hospital. He was assistant professor of clinical surgery (urology) at the University of Cincinnati College of Medicine, Dr. Freiberg was a member of the University Club, Cincinnati Club, Harvard Club, and a past-president of the United Jewish Social Agencies. Surviving are his widow, his parents and two daughters.

Cyrus E. Johnston, M.D., Anna; Starling Medical College, Columbus, 1880; aged 91; former member of the Ohio State Medical Association and the American Medical Association; died December 19. Dr. Johnston practiced in Sidney for almost 50 years. He was a former member of the local board of health and the board of education. On retirement he located at Anna, where he had served as mayor and member of the council. Dr. Johnston was a charter member of the Knights of the Golden Eagle, a member of the Masonic Order, I.O.O.F., and the Presbyterian Church. His widow, three sisters and a brother survive.

Edward Franklin Larkins, M.D., Los Angeles, Calif.; Beaumont Hospital Medical College, St. Louis, 1889; aged 86; died December 16. A native of Meigs County, Dr. Larkins practiced in East Liverpool, Sebring and Alliance until his retirement about ten years ago. Surviving are his widow, three sons and a daughter.

George D. Lummis, M.D., Middletown; Medical College of Ohio, Cincinnati, 1884; aged 78; former member of the Ohio State Medical Association and the American Medical Association; died December 26. Dr. Lummis was health commissioner of Middletown for 53 years. Last year he was elected president of the International Health Officers' Association of the United States and Canada. For 22 years Dr. Lummis was a member of the Ohio Public Health Council, and several times was state delegate to the annual convention of the American Public Health Association. He was always an active participant in the annual session of the Health Commissioners of Ohio. Dr. Lummis was a former legislative committeeman of the Butler County Medical Society. His widow, a son and two brothers survive.

James L. Mason, M.D., Lowell; Medical College of Ohio, Cincinnati, 1883; aged 87; former member of the Ohio State Medical Association and the American Medical Association; died January 3. Dr. Mason practiced in Lowell and Marietta for many years, and retired a few years ago. His widow, a daughter and two sons survive.

John Jay McClung, M.D., Jackson; Ohio Medical University, Columbus, 1898; aged 69; member of the Ohio State Medical Association and the American Medical Association; died January 3. A native of Jackson County, Dr. McClung began the practice of medicine in Glen Roy in 1898, maintaining an office in that Jackson County community for three years. He then located in Jackson and practiced there until his death. Dr. McClung was an active member of the Jackson County Medical Society, which he served as treasurer from 1911 to 1931, and as secretary-treasurer from 1932 to 1937. He was a member of the Masonic Order and the Knights of Pythias. His widow, a son, an adopted daughter and a brother survive.

William F. Mente, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1899; aged 72; died January 3. Dr. Mente retired four years ago, after practicing 35 years in the offices in Cincinnati where his father, the late Dr. Louis Mente, had practiced for many years. His widow and a sister survive.

Jesse Mitchell Moore, M.D., Cleveland; University of Wooster, Medical Department, Cleveland, 1898; aged 72; member of the Ohio State Medical Association and Fellow of the American Medical Association; died December 28. Dr. Moore practiced in Cleveland for 42 years. He was a member of the Cleveland Medical Library Association, the Church of the Covenant and the Knights of Pythias. His widow and three sisters survive.

N. Stone Scott, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1889; aged 78; former member of the Ohio State Medical Association, the American Medical Association and the American College of Surgeons; died December 24, in St. Petersburg, Fla. Dr. Scott retired four years ago after having practiced in Cleveland for nearly 50 years. For a number of years he was professor of surgery and later Dean of the Cleveland College of Physicians and Surgeons, and had served on the board of trustees of the Cleveland Medical Library Association. Surviving are his widow, two daughters and a son, Dr. W. J. Merle Scott, associate professor of surgery, University of Rochester Medical School, Rochester, N. Y.

Magnus A. Tate, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1891; aged 74; member of the Ohio State Medical Association and the American Medical Association; Fellow of the American College of Surgeons; diplomate of the American Board of Obstetrics and Gynecology; died December 7. Dr. Tate retired in 1933 after a distinguished career in the field of obstetrics and gynecology. He was a former chairman of the Section on Obstetrics of the American Medical Association; former professor of obstetrics at Miami Medical College and a past-president of the Cincinnati Academy of Medicine. Dr. Tate practiced in Cincinnati for 42 years. He had been at varying times on the staffs of General, St. Marys, Speers and St. Elizabeth Hospitals and for two years was president of the staff of Good Samaritan Hospital. Dr. Tate was a member of the Society of Colonial Wars, a vestryman of the Calvary Church and a past master of the Calvary Lodge of Masons. His widow and a daughter survive.

Mae Emery White, M.D., Canton; Eclectic Medical College, Cincinnati, 1899; aged 64; member of the Ohio State Medical Association, Fellow of the American Medical Association and member of the American Society for Anesthetists; died December 30. Dr. White practiced medicine for over 40 years and was one of the most active members of the Stark County Medical Society. Upon graduation from medical school she married Dr. William A. White and together they practiced medicine in Leipsic until 1910, when they located in Canton, maintaining joint offices there until the time of her death. Dr. White was actively interested in many community affairs, being a charter member of the College Club, a past-president of the Y.W.C.A., a member of the Quota Club, the D.A.R., and the Girl Scouts Council, on which she was serving at the time of her death. Dr. White was born into the practice of medicine her father, Dr. Joseph Emery, and her mother, Dr. Louise Emery, having been practicing physicians in Leipsic. Surviving are her husband, a daughter and a son, Dr. William A. White, New York City.

NOW'S THE TIME TO BECOME FELLOW OF THE A.M.A.!

Since the 1941 session of the American Medical Association will be held in Cleveland next June 2-6, every eligible Ohio physician will want to attend as many sessions as possible of that great medical gathering. To be "eligible" to attend, a physician must be a Fellow of the A.M.A. Right now is the time for each physician to take care of this important matter by making formal application for Fellowship by writing directly to the American Medical Association, Chicago. Every member of the American Medical Association (every member of the Ohio State Medical Association) is eligible to apply for Fellowship. Cost of Fellowship is $8.00 per year, the same as the subscription to The Journal of the A.M.A. and when a physician becomes a Fellow he receives The Journal of the A.M.A. free.

OHIO DOCTORS SHOULD APPLY NOW FOR FELLOWSHIP IN THE A.M.A.

Openings in Public Health Service

The U. S. Public Health Service announces an examination for appointment in the commissioned corps in the grade of assistant surgeon (medical only). Applicants must not have passed their 32nd birthday on the date the examination is taken, must be citizens of the United States, graduates of a recognized medical college and must have completed by July 1 next at least one year of internship or its equivalent. The compensation of this grade is $3,158 per annum with dependents and $2,699 without dependents. Candidates should arrange to have their physical examinations and prepare their autobiographies before presenting themselves at any one of a number of stated places for examination. The Board of Examiners will be at the U. S. Marine Hospital, Cleveland, on February 11. Application blanks may be obtained by writing to the Surgeon General, U. S. Public Health Service, Washington, D. C.

Toledo—Dr. Elizabeth I. Adamson spoke on "Sex Problems of Youth and the Unmarried Adult", at a meeting of the Social Hygiene Council.

Conference on Medical Service, Feb. 16

Ohio physicians are invited to attend the fifteenth annual meeting of the National Conference on Medical Service, formerly the Northwest Regional Conference, which will be held at the Palmer House, Chicago, Sunday, February 16, beginning at 9:30 A.M. Five basic subjects are scheduled for discussion. They will be presented in the form of symposiums, with time available for questions and answer periods. The five subjects are:

1. Voluntary Group Medical Care Programs.
2. Medical Preparedness.
3. Postgraduate Plans of State Medical Societies.
4. Medical Legislative Problems.
5. Medical Care for Social Security Clients.

Complete details, and copies of the program can be obtained by writing Dr. Harold M. Camp, secretary of the Conference, Monmouth, Illinois.

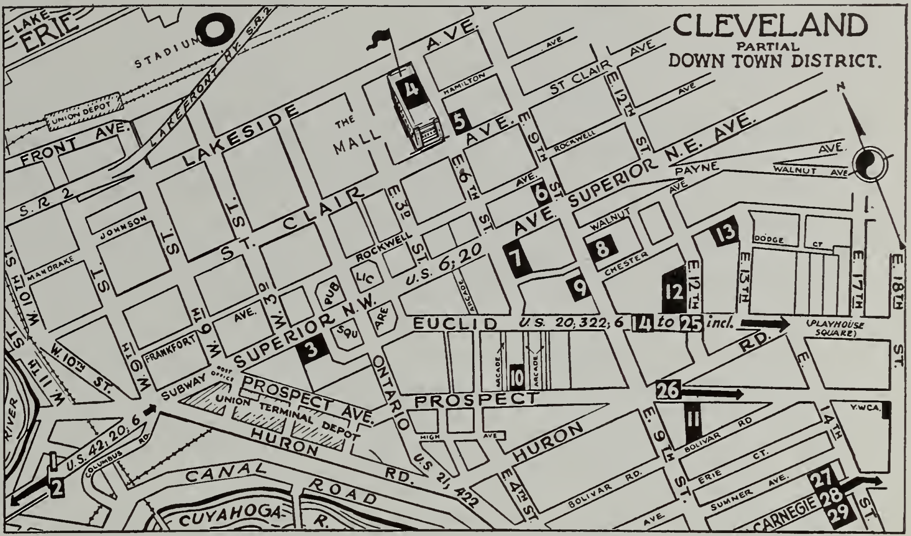
Millersburg—Officers of the Holmes County Board of Health include: Dr. N. P. Stauffer, Killbuck, president; Dr. A. J. Earney, Millersburg, secretary.

A.M.A. SESSION • CLEVELAND

JUNE 2-6, 1941

HOTEL RESERVATIONS

If you expect to attend the Cleveland Session of the American Medical Association now is the most desirable time to make your hotel reservation. The list below offers a wide choice of accommodations. The coupon enables you to send in your reservation in a few minutes' time. Be sure to indicate first, second and third choice, and other details. Mail to Dr. Edward F. Kieger, Chairman Hotel Committee, Cleveland Convention and Visitors' Bureau, Inc., 1604 Terminal Tower, Cleveland, Ohio.



SCHEDULE OF RATES (ALL RATES ARE FOR ROOMS WITH BATH)

Number on Map	HOTELS	SINGLES	DOUBLES	TWIN BEDS	SUITES
29	**ALCAZAR**, Surrey at Derbyshire Rd.	$3.00	$5.00	$5.00	$10.00-$15.00
13	**ALLERTON**, Chester at E. 13th St.	2.50- 3.00	4.25- 4.50		10.00
5	**AUDITORIUM HOTEL**, St. Clair at E. 6th St.	2.00- 4.00	4.00- 5.50	5.00- 7.00	
17	**BELMONT**, 3844 Euclid Ave.	1.75- 3.50	3.00- 5.00	4.00- 6.00	8.00- 10.00
27	**BOLTON SQUARE**, Carnegie at E. 89th St.	2.50- 3.00	3.50- 4.00	4.00- 5.00	8.00- 12.00
11	**CARTER**, Prospect at E. 9th St.	2.75- 5.00	4.00- 7.00	5.00- 9.00	12.00
3	**CLEVELAND**, Public Square	3.00- 6.00	4.50- 6.50	6.00- 10.00	21.00- 30.00
4	**CLEVELAND PUBLIC AUDITORIUM**, Lakeside & E. 6th St.				
10	**COLONIAL**, Prospect at E. 6th St.	2.50- 4.00	4.00- 6.00	5.00- 7.00	
20	**DEVON HALL**, 1588 Ansel Rd.	2.00- 3.00	3.00	3.00	
25	**DOANBROOKE**, 1924 E. 105th St.	2.50	4.00	4.50	
21	**FENWAY HALL**, Euclid at E. 107th St.	3.00- 5.00	4.50- 7.50	5.00- 10.00	6.50- 12.00
15	**FERN HALL**, 3250 Euclid Ave.	1.50- 2.50	2.50- 3.00	4.00- 5.00	
8	**GILLSY**, 1811 E. 9th St.	2.00- 4.00	3.00- 5.00	4.00- 8.00	
7	**HOLLENDEN**, Superior at E. 6th St.	3.00- 8.00	4.50- 10.00	5.00- 12.00	12.00- 16.00
1	**LAKE SHORE**, 12506 Edgewater Dr.	3.50	6.00	6.00- 8.00	8.00- 12.00
9	**MILNER**, 1862 E. 9th St.	1.50- 2.50	2.00	2.00	
14	**NEW AMSTERDAM**, Euclid at E. 22nd St.	2.00- 3.50	3.50- 4.50	4.50- 6.00	
6	**OLMSTED**, Superior at E. 9th St.	2.00- 4.00	3.50- 5.00	5.00- 6.00	20.00
22	**PARK LANE VILLA**, 10510 Park Lake	3.00	4.00- 5.00	6.00	10.00
17	**QUAD HALL—(Men Only)**, 7500 Euclid Ave.	2.50		4.00	
19	**ST. REGIS**, Euclid at E. 82nd St.	2.00- 3.50	3.00- 4.50	3.50- 4.50	
23	**SOVEREIGN**, E. Blvd. & E. 105th St.	3.00- 4.00	5.00- 6.00	6.00- 7.00	10.00
12	**STATLER**, Euclid at E. 12th St.	3.00- 6.00	4.50- 8.00	5.00- 8.00	10.00- 23.00 (2-4 persons)
26	**STERLING**, Prospect at E. 30th St.	2.00- 3.50	3.00- 5.00	4.00- 6.00	8.00- 10.00
16	**STOCKBRIDGE**, 3328 Euclid Ave.	2.00	3.00	4.00	
28	**TUDOR-ARMS**, 10660 Carnegie Ave.	3.00- 6.00		6.00- 10.00	
24	**WADE PARK MANOR**, Park Lane at E. 107th St.	3.00- 4.00	7.00- 10.00	5.00- 6.00	10.00- 16.00
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Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

Officers of the Adams County Medical Society for 1941 are: Dr. A. R. Carrigan, Manchester, president; Dr. R. C. Wenrick, Winchester, vice-president; Dr. O. T. Sproull, West Union, secretary-treasurer; Dr. Sam C. Clark, Cherry Fork, legislative committeeman; Dr. S. J. Ellison, West Union, delegate; Dr. R. L. Lawwill, Seaman, alternate.—O. T. Sproull, M.D., secretary.

BROWN

The following officers of the Brown County Medical Society have been re-elected for 1941: Dr. R. B. Hannah, Georgetown, president; Dr. Geo. P. Tyler, Jr., Ripley, secretary and delegate; Dr. Hannah, alternate.—R. B. Hannah, M.D., president.

BUTLER

Officers of the Butler County Medical Society for 1941 are: Dr. F. W. Brosius, Middletown, president; Dr. E. T. Storer, Middletown, vice-president; Dr. Mabel E. Gardner, Middletown, secretary; Dr. Walter A. Reese, Middletown, treasurer; Dr. C. T. Atkinson, Middletown, delegate; Dr. Harry M. Lowell, Hamilton, alternate. —Vera Coombs Iber, M.D., retiring secretary.

CLERMONT

The new legislative committeeman of the Clermont County Medical Society is Dr. Carl Minning, Williamsburg, instead of Dr. Thomas Longworth, Felicity, as previously reported.—J. M. Coleman, M.D., secretary.

HAMILTON

The Academy of Medicine of Cincinnati presented the following programs during January:

January 7—"The Use of Sulfanilylguanidine in Surgery", Dr. Warfield M. Firor, acting surgeon-in-chief, Johns Hopkins University School of Medicine, Baltimore, Md.

January 14—"Campaign Against Cancer", Dr. Louis C. Kress, director, Division of Cancer Control, New York State Department of Health, Albany, N. Y. This meeting was under the auspices of the Cancer Control Council of the Public Health Federation of Cincinnati.

January 21—Hospital Night. Program in the surgical amphitheatre of Cincinnati General Hospital, arranged by a special committee of the staff of General Hospital. (A) From the Department of Dermatology: "Lupus Vulgaris With a New Method of Therapy", presentation of case by Dr. Lawrence C. Goldberg; "Psoriasis in the Colored", presentation of two cases by Dr. George E. Clarke. (B) From the Department of Internal Medicine: "Beriberi", presentation of a case by Dr. William Bennett Bean; "Heart Failure due to Arteriovenous Aneurism with Surgical Care", presentation of a case by Dr. Virgil D. Hauenstein; "Arteriovenous Aneurism and Aortic Insufficiency", a case report with autopsy, presented by Dr. J. Harold Kotte. (C) From the Department of Psychiatry: "Treatment of Asthma by Psychotherapy", presentation of a case by Dr. J. Robert Hawkins. (D) From the Department of Neurology: "Treatment of Subacute Combined Degeneration with Liver Extract", Dr. Henry D. Lederer.

January 28—"Making the Patient Safe for Anesthesia", Dr. E. A. Rovenstine, professor of anesthesia, New York University and Bellevue Hospital, New York City. This meeting was held under the auspices of the Cincinnati Society of Anesthetists.—Bulletin.

HIGHLAND

At a meeting of the Highland County Medical Society, Wednesday, December 4, at Hillsboro, the following officers were elected for the ensuing year: Dr. J. C. Larkin, Hillsboro, president; Dr. J. D. McBride, Hillsboro, vice-president; Dr. W. B. Roads, Hillsboro, secretary-treasurer; Dr. Larkin, legislative committeeman; Dr. H. W. Chaney, Sugartree Ridge, delegate; Dr. J. H. Frame, Highland, alternate.—W. B. Roads, M.D., secretary.

Dr. Phillip T. Knies, Columbus, spoke on "Vitamins", at a meeting of the society, Wednesday noon, January 8, at the Parker Hotel, Hillsboro. At the same time the Woman's Auxiliary met at luncheon at the Highland House. Dr. W. M. Hoyt, Hillsboro, member of the State Medical Board, was the guest speaker.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CHAMPAIGN

Officers of the Champaign County Medical Society for 1941 are: Dr. A. F. Hawk, Urbana, president; Dr. R. V. Anderson, North Lewisburg, vice-president; Dr. V. R. Frederick, Urbana, secretary-treasurer; Dr. D. C. Houser, Urbana, legislative committeeman and delegate; Dr. M. C. Houston, Urbana, alternate.—F. R. Grogan, M.D., retiring secretary.

CLARK

Dr. Wm. M. Skipp, Youngstown, President, Ohio State Medical Association, discussed some of the activities of the Association at a meeting

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of the Clark County Medical Society, Thursday, January 9, at Springfield.

DARKE

Officers of the Darke County Medical Society for 1941 are: Dr. Donald G. Carlson, Ansonia, president; Dr. L. N. Shroder, Greenville, vice-president; Dr. W. D. Bishop, Greenville, secretary-treasurer; Dr. A. F. Sarver, Greenville, legislative committeeman; Dr. C. I. Stephens, Ansonia, delegate; Dr. P. G. Lenhert, Arcanum, alternate.—W. D. Bishop, M.D., secretary.

GREENE

Dr. William P. Ultes, Springfield, gave an instructive lecture on "X-Ray Therapy in Disease", at a meeting of the Greene County Medical Society, January 2, at Xenia. The society voted to waive the payment of local dues of members called to serve in the United States Army.—Donald F. Kyle, M.D., secretary.

MIAMI-SHELBY

The semi-annual Joint Meeting of the Miami and Shelby County Medical Societies was held at the Favorite Hotel, Piqua, Thursday afternoon, January 9. Following a social hour and luncheon, Dr. M. M. Zinninger, associate professor of surgery, University of Cincinnati College of Medicine, gave an illustrated talk on "Pre-Operative and Post-Operative Care of Surgical Patients".—G. A. Woodhouse, M.D., secretary, Miami County Medical Society.

MONTGOMERY

Proposed amendments to the society's constitution and by-laws, and the "Enabling Act" were considered at a meeting of the Montgomery County Medical Society, January 3, at Dayton.

A clinical program was presented by members of the staff of St. Elizabeth's Hospital at a meeting of the society at the hospital, Friday evening, January 17.—Mildred E. Jeffrey, executive secretary.

PREBLE

Dr. C. J. Derby, Dayton, spoke on "Varicose Veins and Their Treatment", at a meeting of the Preble County Medical Society at Eaton, Thursday noon, January 9.—News clipping.

The society elected the following new officers: Dr. C. E. McKinley, Camden, president; Dr. E. P. Trittschuh, Lewisburg, vice-president; Dr. F. R. Smith, New Paris, secretary-treasurer; Dr. Geo. W. Flory, Eaton, delegate; Dr. J. I. Nisbet, Eaton, alternate.—J. R. Williams, M.D., retiring secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

ALLEN

Dr. C. G. Weigand of the Eli Lilly Company Research Laboratories, Indianapolis, Indiana, spoke on "The Present Status of Vitamin Therapy", at a meeting of the Academy of Medicine of Lima and Allen County Tuesday evening, December 17, at the Memorial Hospital, Lima.—News clipping.

CRAWFORD

Dr. C. W. McGavran, Columbus, spoke on "Gastric and Duodenal Ulcers", at a meeting of the Crawford County Medical Society, Monday, January 6, at Bucyrus.—J. W. Arnold, M.D., secretary.

The "Enabling Act" was discussed at a luncheon meeting of the Woman's Auxiliary, Tuesday, January 7, at Bucyrus. A constitution was adopted, committees appointed and the following new officers installed: Mrs. John M. Kidd, Galion, president; Mrs. C. A. Lingenfelter, Bucyrus, president-elect; Mrs. D. D. Bibler, Bucyrus, vice-president; Mrs. M. L. Helfrich, Galion, secretary-treasurer.—News clipping.

LOGAN

Case reports were presented by Drs. M. L. Pratt, F. Blair Webster, Robert B. Pratt and C. K. Startzman, at a dinner meeting of the Logan County Medical Society, Friday, December 6, at Bellefontaine. The society voted approval of the formation of a Woman's Auxiliary. —News clipping.

MARION

At a meeting of the Marion County Academy of Medicine, December 2, at Marion, the following Marion physicians were elected officers for the ensuing year: Dr. J. G. McNamara, president; Dr. F. L. Thomas, vice-president; Dr. F. W. Rea, secretary; Dr. K. H. Feistkorn, treasurer; Dr. T. H. Sutherland, legislative committeeman.—John A. McNamara, M.D., secretary.

Dr. George L. Sackett, Cleveland, spoke on "Common Errors in X-Ray Diagnosis", at a meeting of the society at Marion, January 7.—News clipping.

SENECA

Dr. J. A. Meunzer, Toledo, spoke on "Silicosis and Related Chest Conditions", at a meeting of the Seneca County Medical Society, Thursday evening, January 9, at the Shawhan Hotel, Tiffin. There were 25 members present.—N. E. Williard, M.D., secretary-treasurer.

VAN WERT

The following Van Wert physicians are officers of the Van Wert County Medical Society for 1941: Dr. J. R. Jarvis, president; Dr. Wayne Smith, vice-president; Dr. G. Austin Edwards, secretary-treasurer; Dr. Chas. R. Keyser, legislative committeeman; Dr. Jarvis, delegate; Dr. Edwards, alternate.—O. E. Cress, M.D., retiring secretary.

WYANDOT

Officers of the Wyandot County Medical Society for 1941 are: Dr. R. L. Garster, Upper

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Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

HENRY

Dr. Max T. C. Schnitker, Toledo, spoke on "Treatment of Acute Head Injuries", at a meeting of the Henry County Medical Society, Tuesday evening, January 14, at Napoleon.—News clipping.

OTTAWA

Officers of the Ottawa County Medical Society for 1941 are: Dr. A. S. Mack, Oak Harbor, president; Dr. G. A. Boon, Oak Harbor, vice-president; Dr. John W. Burrows, Lakeside, secretary-treasurer; Dr. H. J. Pool, Port Clinton, chairman, legislative committee; Dr. L. L. Belt, Marblehead, delegate; Dr. F. E. Miller, Curtice, alternate.—C. R. Wood, M.D., retiring secretary.

PAULDING

The Paulding County Medical Society has elected the following officers for 1941: Dr. G. L. Doster, Paulding, president; Dr. K. C. Evans, Payne, vice-president; Dr. A. F. Burson, Oakwood, secretary-treasurer; Dr. K. C. Evans, Payne, legislative committeeman; Dr. R. H. Mouser, Paulding, public relations committeeman; Dr. T. P. Fast, Grover Hill, medical economics committeeman; Dr. L. R. Fast, Paulding, delegate; Dr. D. E. Farling, Payne, alternate.—G. L. Doster, M.D., retiring secretary.

SANDUSKY

At a meeting of the Sandusky County Medical Society, Thursday, December 19, at Fremont, the following officers were elected for the ensuing year: Dr. C. A. Kingman, Bellevue, president; Dr. J. W. Agnew, Gibsonburg, vice-president; Dr. H. N. Kuhn, Bellevue, secretary-treasurer; Dr. C. I. Kuntz, legislative committeeman; Dr. C. J. Wolfe, Fremont, public relations committeeman; Dr. E. A. Baker, Clyde, medical economics committeeman; Dr. T. R. Cunningham, Fremont, delegate; Dr. C. J. Wolfe, Fremont, alternate.—J. W. Agnew, M.D., retiring secretary.

WOOD

Officers of the Wood County Medical Society for 1941 are: Dr. F. V. Boyle, Bowling Green, president; Dr. E. H. Mercer, Bowling Green, vice-president; Dr. H. W. Mannhardt, Bowling Green, secretary-treasurer; Dr. D. R. Barr, Grand Rapids, legislative committeeman; Dr. P. F. Orr, Perrysburg, delegate; Dr. J. R. Janney, North Baltimore, alternate.—R. N. Whitehead, M.D., retiring secretary.

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during January:

January 3—Clinical and Pathological Section. "Infections of the Hand", Dr. C. F. Ward; "Pyuria and Scurvy in Infant Eight Months Old", Dr. W. B. Markus; "Treatment of Comminuted Fracture of the Patella by Excision of the Fragments", Dr. W. G. Stern; "Gas Gangrene", Dr. D. S. Spreng.

January 10—Joint Meeting, Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "A Note on Leprosy in Puerto Rico", Dr. J. A. Doull; "Poliomyelitis in Small Laboratory Animals", Dr. J. A. Toomey and W. S. Takacs, A.B.; "The Neurotropism of Poliomyelitis Virus in Monkeys, Chimpanzees and Man", Dr. D. Bodian and Dr. H. A. Howe.—Bulletin.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

COLUMBIANA

New officers of the Columbiana County Medical Society are: Dr. C. J. Maxwell, Wellsville, president; Dr. J. S. Atchison, East Palestine, vice-president; Dr. J. W. Schoolnic, East Liverpool, secretary-treasurer; Dr. J. A. Fraser, East Liverpool, delegate; Dr. P. H. Beaver, Leetonia, alternate.—P. W. Conrad, M.D., retiring secretary.

MAHONING

Officers of the Mahoning County Medical Society for 1941 are: Dr. O. J. Walker, president; Dr. Walter King Stewart, president-elect; Dr. John Noll, secretary; Dr. Elmer Nagel, treasurer; Dr. Dean A. Nesbit, chairman, legislative committee; Dr. Stewart, chairman, public relations and economics committee; Dr. Stewart, Dr. Edward J. Reilly and Dr. Gordon G. Nelson, delegates; Dr. Wm. H. Evans, Dr. Dean A. Nesbit and Dr. Ivan C. Smith, alternates.—John Noll, M.D., secretary.

Cy Hungerford of the Pittsburgh Post-Gazette, cartoonist and humorist, was the principal speaker at the Annual Banquet of the society, Tuesday evening, January 21, at the Youngstown Club, Youngstown. Dr. David R.

ADVANCES IN CANNING TECHNOLOGY

II. Development of the Tin Container

● Appert, discoverer of canning, did not know the reasons why his procedure for food preservation was successful. He clearly recognized, however, that his containers must be so constructed and sealed as to prevent contact of the food therein with air, after heat processing. Today we know that this is necessary to prevent re-infection of the food with air-borne, spoilage microorganisms.

As containers, Appert suggested glass containers sealed by corks; the reason given is that glass is the "matter most impenetrable by air" (1). In 1810, one year after Appert's discovery was announced, Peter Durand, an Englishman, patented a procedure very similar to Appert's, which covered the use of a variety of containers, among them "vessels of tin (tin-plated iron)." From that time forward, the use of tin-plated containers rapidly progressed.

Commercial canning began in America about 1819. In 1825, Kensett and Daggett, two pioneers of canning in this country, received an American patent covering the use of tin-plated containers. Shortly thereafter, the name "tin can" was coined from the abbreviation of the formal name, "tin cannisters."

The story of the development of the tin can in America is an absorbing one which has been related in more detail elsewhere (2, 3, 4). By the time of the war between the States, the "hole and cap" type of can had been evolved. About 1890, can-making machinery was introduced to replace the older hand-manufacturing operations whereby a skilled artisan could produce about 6 cans per hour. Modern can-manufacturing lines operate at speeds as high as 350 cans per minute.

The first three decades of the current century witnessed the development of machinery to make the modern type or "sanitary style" can now universally used for fruits, vegetables, and a wide variety of other products. The past ten years have brought vast improvements in the tin plate from which cans are made. Not long ago, almost any type of sheet steel was considered satisfactory. Today plate for cans must comply with rigid physical and chemical specifications established by the Research Laboratory of the can manufacturer.

As far as can be determined, tin containers were first introduced to avoid breakage which was experienced with the glass containers proposed by Appert. The other desirable characters of the tin container for foods were not fully appreciated at first; among these advantages should be mentioned its rapid rate of heat transfer, its low weight in relation to its capacity, and its opacity to light. Nor was the importance which the tin can has attained in our national life fully appreciated until world developments caused America to pause and take inventory. Only then was it generally realized that from its humble start 130 years ago, the tin can has risen to become an indispensable article in our modern civilization.

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REFERENCES

(1) 1811. The Art of Preserving. M. Appert, Black, Parry and Kinsbury, London.

(2) 1937. The Canning Clan. E. C. May, The Macmillan Co., New York.

(3) 1937. Appertizing. A. W. Bitting, The Trade Pressroom, San Francisco.

(4) 1940. The National Geographic Magazine, November, p. 659.

We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned-foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the sixty-eighth in a series which summarizes, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.

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Williams, Girard, who has been practicing medicine for 50 years, was guest of honor.—Bulletin.

PORTAGE

Lt. Colonel H. E. Boucher, chief medical officer, Ohio Selective Service Headquarters, discussed "Requirements for Selective Service", at a meeting of the Portage County Medical Society, Thursday evening, January 9, at the home of Dr. A. O. De Weese, Kent.—Emily J. Widdecombe, M.D., secretary.

STARK

Dr. Frank E. Hamilton of the Department of Surgery, Ohio State University College of Medicine, Columbus, spoke on "The New Method of Treatment for Post-Operative Gas and General Abdominal Pain", at a meeting of the Stark County Medical Society, Thursday evening, January 9, at the Elks' Club, Canton.

Officers of the society for 1941 are: Dr. J. Sharp Wilson, Canton, president; Dr. Fred G. King, Canton, president-elect; Dr. Clair B. King, Canton, secretary-treasurer; Dr. Harold J. Bowman, Canton, chairman, legislative committee; Dr. J. A. McNalley, Canton, chairman, public relations committee; Dr. H. J. Schwensen, Canton, chairman, medical economics committee; delegates—Dr. George N. Wenger, Massillon; Dr. A. R. Basinger, North Canton; Dr. J. Edwin Purdy, Canton; alternates—Dr. Kay E. Liber, Canton; Dr. J. E. Aten, Canton; Dr. L. E. Anderson, Greentown.—Clair B. King, M.D., secretary.

SUMMIT

The following papers were presented at a meeting of the Summit County Medical Society, Tuesday evening, January 7, at the Mayflower Hotel, Akron: "The Vaccine or Serum Treatment of Whooping Cough", Dr. E. R. Shaffer; "The Relationship of Coronary Disease of the Heart to Heart Disease in General", Dr. P. R. Adams; "Remarks Upon the Present Anti-Syphilis Campaign", Dr. F. M. McDonald; "Serum Disease", Dr. K. D. Way; "Surgery of the Thyroid", Dr. W. McK. Johnston.—Bulletin.

TRUMBULL

Dr. D. R. Williams, Girard, was guest of honor at a dinner meeting of the Trumbull County Medical Society, Wednesday evening, December 18, at the Hotel Warner, Warren. A special pin was presented to Dr. Williams by Dr. W. D. Cunningham, Girard, in behalf of the society, in recognition of his having completed 50 years in the active practice of medicine. Dr. Howard Dittrick, Cleveland, gave an address on "A Medical Pioneer of Trumbull County a Century Ago". Approximately 140 persons attended the dinner, including members, wives and guests. Among the guests were Dr. Wm. M. Skipp, Youngstown, President, and Dr. Harry V. Paryzek, Cleveland, President-Elect of the Ohio State Medical Association, and Dr. R. L. Rutledge, Alliance, Councilor for the Sixth District.—News clipping.

New officers of the society are: Dr. Paul C. Gauchat, Warren, president; Dr. D. R. Mathie, Newton Falls, vice-president; Dr. A. H. Seiple, Warren, secretary-treasurer; Dr. R. D. Herlinger, Warren, legislative and public relations committeeman and delegate; Dr. J. D. Knox, Warren, alternate.—A. H. Seiple, M.D., secretary.

Mrs. J. Edwin Purdy, Canton, President of the Woman's Auxiliary to the Ohio State Medical Association, was guest speaker at a luncheon meeting of the Woman's Auxiliary to the Trumbull County Medical Society, Tuesday afternoon, January 7, at the Hotel Warner, Warren.—News clipping.

Seventh District

(COUNCILOR: CARL GOEHRING, M.D., STEUBENVILLE)

JEFFERSON

Officers of the Jefferson County Medical Society for 1941 are: Dr. J. W. Albaugh, Mingo Junction, president; Dr. Ben L. Casey, Toronto, vice-president; Dr. D. R. Cahill, Steubenville, secretary-treasurer; Dr. S. J. Podlewski, Steubenville, delegate.—D. R. Cahill, M.D., secretary.

TUSCARAWAS

A symposium on tuberculosis was presented at a meeting of the Tuscarawas County Medical Society, Thursday evening, December 12, at the Reeves Hotel, New Philadelphia. Speakers were Dr. C. M. Dougherty, Dr. W. E. Hudson and Mrs. Elizabeth Barr, R.N.—News clipping.

Dr. J. R. Brandon, Canton, spoke on "Head Pains", at a meeting of the society, Thursday, January 9, at New Philadelphia.—News clipping.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

GUERNSEY

Dr. H. M. Clodfelter, Columbus, gave a very interesting talk on "Endocrinology", at a meeting of the Guernsey County Medical Society, Thursday noon, January 2, at the Berwick Hotel, Cambridge.—M. J. Thomas, M.D., secretary.

LICKING

Officers of the Licking County Medical Society for 1941 are: Dr. R. C. Mauger, Newark, president; Dr. R. H. Williams, Granville, vice-president; Dr. John E. Hendricks, Newark, secretary-treasurer; Dr. G. W. Sapp, Newark, chairman, legislative committee; Dr. Donald R. Sperry, Newark, chairman, public relations committee; Dr. Ralph E. Pickett, Newark, chairman, medical economics committee; Dr. George A. Gressle,

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph. Gon. & Ven. Dis., *23*, 201 (March) 1939.

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Newark, delegate; Dr. J. Fleek Miller, Newark, alternate.—John E. Hendricks, M.D., secretary.

PERRY

At a meeting of the Perry County Medical Society, Thursday, December 19, at New Lexington, the following officers were elected for the ensuing year: Dr. O. D. Ball, New Lexington, president; Dr. R. W. Miller, Hemlock, vice-president; Dr. F. J. Crosbie, New Lexington, secretary-treasurer; Dr. C. B. McDougal, New Lexington, legislative committeeman; Dr. O. D. Ball and Dr. Crosbie, public relations committee; Dr. H. F. Minshull, New Lexington, Dr. Ball and Dr. McDougal, medical economics committee; Dr. James Miller, Corning, delegate; Dr. Edgar D. Allen, Crooksville, alternate.—F. J. Crosbie, M.D., secretary.

WASHINGTON

Dr. Howard T. Phillips, Wheeling, W. Va., spoke on "Recent Advances in the Treatment of Skin Disease", at a meeting of the Washington County Medical Society, Wednesday, January 8, at the Wakefield Hotel, Marietta, attended by 20 members. His talk was most interesting, and was well-illustrated by lantern slides.—Deane H. Northrup, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

GALLIA

The following Gallipolis physicians have been elected officers of the Gallia County Medical Society for 1941: Dr. F. W. Shane, president; Dr. N. H. Foster, vice-president; Dr. C. E. Richards, secretary-treasurer; Dr. C. E. Holzer, legislative committeeman; Dr. H. B. Thomas, public relations committeeman; Dr. Leo C. Bean, medical economics committeeman; Dr. S. L. Bossard, delegate.—C. E. Richards, M.D., secretary.

HOCKING

At a meeting of the Hocking County Medical Society, Wednesday, December 11, at Logan, the following officers were elected for the ensuing year: Dr. L. S. Boocks, Logan, president; Dr. John W. Doering, Logan, vice-president; Dr. M. H. Cherrington, Logan, secretary-treasurer; Dr. John S. Cherrington, Logan, legislative committeeman; Dr. Allan A. Cole, Dr. M. H. Cherrington and Dr. H. M. Boocks, Logan, public relations and medical economics committee; Dr. Cole, delegate; Dr. C. T. Grattidge, Laurelville, alternate.—M. H. Cherrington, M.D., secretary.

LAWRENCE

Officers of the Lawrence County Medical Society for 1941 are the following Ironton physicians: Dr. Thomas E. Miller, president; Dr. G. K. Mahl, vice-president; Dr. Wm. A. French, secretary-treasurer; Dr. V. V. Smith and Dr. C. H. Gallagher, legislative committee; Dr. William W. Lynd, public relations committeeman; Dr. Ralph F. Massie, medical economics committeeman; Dr. George G. Hunter, delegate; Dr. F. R. Stewart, alternate.—Thomas E. Miller, M.D., president.

SCIOTO

Dr. Dana W. Cox, Columbus, assistant professor, Ohio State University College of Medicine, spoke on "Some of the More Common Obstetrical Problems", at a meeting of The Hempstead Academy of Medicine at the Portsmouth General Hospital, Monday evening, January 13. Dr. Arthur Baer discussed "Allergic Lung Edema", at the same meeting.—Sol Asch, M.D., secretary.

A meeting of the Woman's Auxiliary was held Wednesday afternoon, January 8, in the nurses' home of Portsmouth General Hospital—News clipping.

VINTON

Dr. B. F. Wills, McArthur, was re-elected president and Dr. H. D. Chamberlain, McArthur, sec-

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retary and delegate of the Vinton County Medical Society for 1941.—H. D. Chamberlain, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

DELAWARE

The Delaware County Medical Society has re-elected the following officers: Dr. D. S. James, Delaware, president; Dr. F. M. Stratton, Delaware, secretary.—F. M. Stratton, M.D., secretary.

FRANKLIN

The following programs were presented by the Columbus Academy of Medicine during January:

January 6—"Progress in Obstetrics", Dr. Thomas F. Ross; "Progress in Pediatrics and Immunology", Dr. Marion L. Ainsworth; "Progress in Medicine", Dr. Phillip T. Knies.

January 20—"Progress in Surgery", Dr. Gilman D. Kirk; "Progress in Medicine", Dr. Clark P. Pritchett; "Progress in Endocrinology", Dr. Emmerich von Haam.—Bulletin.

Officers of the Academy for 1941 are: Dr. C. C. Sherburne, president; Dr. H. E. LeFever, president-elect; Dr. Gilman D. Kirk, secretary-treasurer; Dr. H. H. Schwarzell, chairman, legislative committee; Dr. John Edwin Brown, Jr., chairman, civic affairs committee; Dr. L. H. Van Buskirk, chairman, medical economics committee; Dr. John M. Thomas, Dr. George T. Harding, Dr. Edson J. Emerick, Dr. I. B. Harris, Dr. L. L. Bigelow, Dr. Russel G. Means, delegates; Dr. Robin C. Obetz, Dr. Link M. Murphy, Dr. H. E. LeFever, Dr. John H. Mitchell, Dr. John E. Brown, Jr., Dr. Roy J. Secrest, alternates.—Stanley R. Mauck, executive secretary.

MORROW

Officers of the Morrow County Medical Society for 1941 are: Dr. F. M. Hartsook, Cardington, president; Dr. C. S. Jackson, Mt. Gilead, vice-president; Dr. F. H. Sweeney, Mt. Gilead, secretary; Dr. R. L. Pierce, Mt. Gilead, treasurer; Dr. E. C. Sherman, Cardington, legislative committeeman; Dr. Wm. Lowell Murphy, Cardington, delegate; Dr. J. P. Ingmire, Mt. Gilead, alternate.—Frank H. Sweeney, M.D., secretary.

ROSS

The following Chillicothe physicians have been elected officers of the Ross County Medical Society for 1941: Dr. Harold M. Crumley, president; Dr. E. Paul Shepherd, vice-president; Dr. Ralph W. Holmes, secretary-treasurer; Dr. L. T. Franklin, legislative committeeman; Dr. L. E. Hoyt, Dr. David A. Perrin and Dr. Glen Nisley, public relations committee; Dr. O. P. Tatman, delegate; Dr. Robert E. Quinn, alternate.—R. C. Bane, M.D., retiring secretary.

Dr. C. J. DeLor and Dr. John W. Means, Columbus, discussed "The Medical and Surgical Aspects of Gall Bladder Disease", at a meeting of the Academy, January 2, at the Warner Hotel, Chillicothe. A brief talk on the activities of the Ohio State Medical Association was made by Dr. C. C. Sherburne, Columbus, Councilor for the Tenth District.—News clipping.

UNION

Officers of the Union County Medical Society for 1941 include: Dr. H. C. Drake, Richwood, president; Dr. Angus McIvor, Marysville, vice-president; Dr. Fred C. Callaway, Marysville,

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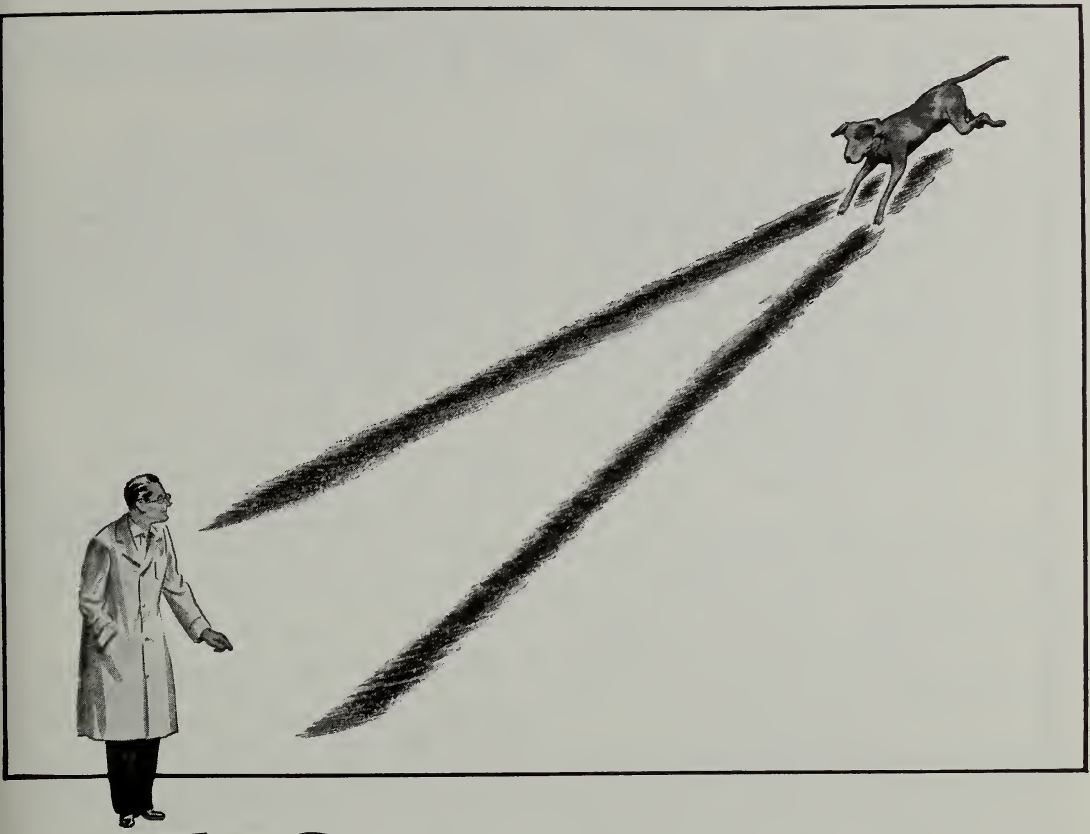

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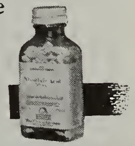

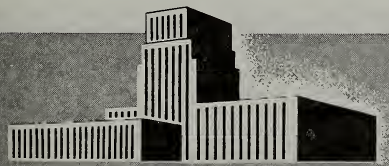

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Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

ERIE

Officers of the Erie County Medical Society for 1941 include the following physicians: Dr. E. R. Grierson, Sandusky, president; Dr. E. C. Alexander, Castalia, vice-president; Dr. R. M. Knoble, Sandusky, secretary-treasurer; Dr. H. N. Sarchet, Sandusky, chairman, legislative committee; Dr. H. W. Lehrer, Sandusky, chairman, public relations committee; Dr. Paul N. Squire, chairman, medical economics committee; Dr. Knoble, delegate; Dr. H. L. Sowash, Sandusky, alternate.—Ross M. Knoble, M.D., secretary.

HOLMES

The following phyisicians are officers of the Holmes County Medical Society for 1941: Dr. Neven P. Stauffer, Killbuck, president; Dr. A. J. Earney, Millersburg, secretary-treasurer; Dr. A. T. Cole, Millersburg, legislative committeeman; Dr. Luther W. High, Millersburg, delegate; Dr. J. C. Elder, Millersburg, alternate.—A. J. Earney, M.D., secretary.

HURON

Officers of the Huron County Medical Society for 1941 are: Dr. J. D. Bradish, New London, president; Dr. R. H. Breneman, Greenwich, secretary; Dr. Geo. F. Linn, Norwalk, legislative committeeman; Dr. J. C. Steiner, Willard, public relations committeeman; Dr. T. H. Smith, New London, medical economics committeeman; Dr. Bradish, delegate; Dr. Breneman, alternate. —H. A. Erlenbach, M.D., retiring secretary.

LORAIN

Dr. Spencer Braden, Cleveland, spoke on "Neurosurgical Management of Cranial and Intracranial Injuries", at a meeting of the Lorain County Medical Society, Tuesday afternoon, January 14, at the Elk's Restaurant, Elyria.—L. H. Trufant, M.D., secretary.

MEDINA

Officers of the Medina County Medical Society for 1941 are: Dr. J. L. Jones, Medina, president; Dr. J. R. Moorehead, Seville, vice-president; Dr. Morris Wilderom, Medina, secretary-treasurer; Dr. R. L. Mansell, Medina, legislative committeeman; Dr. H. T. Pease, Wadsworth, chairman, public relations committee; Dr. Pease, delegate; Dr. H. G. Lehrer, Wadsworth, alternate.—Morris Wilderom, M.D., secretary.

RICHLAND

A sound movie in technicolor entitled "Respiration and Circulation", sponsored by Ciba Pharmaceutical Products, Inc., was shown at a meeting of the Richland County Medical Society, Thursday afternoon, January 16, at the Mansfield General Hospital.—George L. Evans, M.D., secretary.

WAYNE

Officers of the Wayne County Medical Society for 1941 are: Dr. O. P. Ulrich, Orrville, president; Dr. E. W. Douglas, Wooster, vice-president; Dr. R. C. Paul, Wooster, secretary-treasurer; Dr. Robt. F. Hecker, Orrville; Dr. L. G. Strauss, Wooster, and Dr. H. J. Mitchell, Fredericksburg, legislative committee; Dr. F. C. Ganyard, Dr. L. A. Adair and Dr. A. J. Hartzler, Wooster, public relations committee; Dr. Paul, delegate; Dr. L. G. Strauss, Wooster, alternate.—R. C. Paul, M.D., secretary.

Cambridge—Dr. M. J. Thomas, secretary of the Guernsey County Medical Society, has been appointed part-time health commissioner of Guernsey County.

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Physicians who have recently completed their internships, or physicians, with experience, desiring to change locations are requested to file their names with the State Headquarters Office, Ohio State Medical Association, 1005 Hartman Theater Building, Columbus, Ohio.

Frequently, the Headquarters Office receives inquiries from physicians seeking assistants, partners, or men qualified for positions on private hospital staffs.

If physicians seeking new opportunities or desiring to change locations will file their names with that office, an effort will be made to furnish them with suggestions and at the same time render a service to members seeking assistants, etc.

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The Physician's Bookshelf

Child Care and Training by Marion L. Faegre and John E. Anderson ($2.50. Fifth Edition. *University of Minnesota Press, Minneapolis)* stands as the text in its field and in its up to the minute dress is recommended to all who are interested in this subject.

A Textbook of Medicine, edited by Russell L. Cecil, M.D. ($9.50. *Saunders, Philadelphia)* is now in its fifth edition. This masterly text makes this fifth appearance with more than the usual number of changes. Ten entirely new subjects, many revisions and 131 new illustrations make it complete and up to the minute.

Doctor in Arabia, by Paul W. Harrison, M.D. ($3.00. *The John Day Co., New York)* is the story of 29 years of practice among the Arabs. Interestingly told. Entertaining and inspiring!

Dream Within Her Hand, by Alice Ross Colver and Helen Brant Birdsell ($2.75. *Macrae-Smith Co., Philadelphia)* is the biography of Cornelia Chase Brant, M.D., who became the first woman specialist in X-ray and eventually dean of the New York Medical College and Hospital for Women while raising a family of three. The story as told rightly emphasizes the fine adjustment in her personal life which made her a success in home and practice and thus contributed much to the freedom of women in medicine.

Bellevue, by Lorraine Maynard in collaboration with Laurence Miscall, M.D. ($2.75. *Julian Messner, Inc., New York)* is the story of this famous hospital in terms of the people who go there. A great human document which any one will enjoy and especially a physician removed from the metropolis.

A Surgeon's Life ($3.50. *G. P. Putnam's Sons, New York)* is the autobiography of J. M. T. Finney of Johns Hopkins whose story is the story of that institution. This sweet biography is especially to be recommended for its tales of Hopkins in its prime.

Your Allergy, by June B. Cohen and Milton B. Cohen, M.D. *(Lippincott, Philadelphia)* have avoided most of the errors common to medical books written for laymen. The language is simple. The style is readable. At the same time, they have presented the subject of allergy so that its background can be understood and what is more important they have taught their readers that physicians treat the patient with allergic manifestations and not the manifestation as such.

The Ohio Guide, compiled by the Writer's Program of the Work Projects Administration in the State of Ohio done under the Editorial Guidance of Professor Harlan Hatcher ($2.75. *Oxford Press, New York City)* tells the story of our state very well in the manner which was intended. It is interesting to note as is usual with such projects the medical profession and its art is entirely forgotten as a force in the social development of a commonwealth.

Good Health and Bad Medicine, by Harold Aaron, M.D. ($3.00. *Robert M. McBride & Co., New York City)* has been written by the consultant for the Consumers Union for its members and people of a similar type of mind. It is readable and because of its attack on headache pills, insomnia potions, as well as laxatives and indiscriminate self-medication, we shall not detract from its value as a useful book by pointing out its shortcomings.

Practice of Medicine, by Jonathan C. Meakins, M.D., Third Edition. ($10.00. *Mosby, St. Louis)* is brought up to the minute by many changes, often matters of detail but sometimes things of large importance, chemotherapy of pneumonia,

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1930

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Alcohol and Traffic, by Samuel R. Gerber, M.D., Coroner of Cuyahoga County, Cleveland, Ohio *(Better Books Press, Station B, Columbus, Ohio)* is a most interesting study of this problem based upon the experience of our own largest metropolitan area. It is presented in a readable but inexpensive form.

Laboratory Text in Pharmacology, by Robert P. Walton, professor of Pharmacology in the School of Medicine of the University of Mississippi ($1.50. *Lippincott, Philadelphia)* is a collection of experimental exercises from one of the first separate laboratories for practical instruction in pharmacodynamics.

Berkeley Moynihan, Surgeon, by Donald Bateman ($4.00. *Macmillan, New York)* is the life of the famous English surgeon who for the first 30 years of this century dominated British surgery. This is not a detailed study of the man and his work but rather a warm appreciative picture of his life and character.

Doctor Dogbody's Leg, by James Norman Hall ($2.50. *Little Brown and Co., Boston)* contains ten salty tales of a seagoing Munchausen. These are tales with a flavor of the sea that no one should miss who loves a good story and admires a man who, drunk or sober, never spoils one in his telling of it.

The Ship's Surgeon's Yarn, by Francis Brett Young ($2.50. *Reynal and Hitchcock, New York)* is a collection of a dozen well told tales of the sea.

When Loneliness Comes, by George A. Glenn, M.D., Senator from Colorado ($3.00. *Published by the author, Denver)* using the jungle and its life as a background, his characters make a ruthless exposé of the problems of civilization. Divorce, mismating, birth-control, rejuvenation, abortions, religion, organized medicine and large pharmaceutical houses all catch it. Yet the work has merit and certainly is entertaining.

The Reason for Birth Control, with special reference to business conditions, population growth, and national defense by Irving Burch. *(Population Reference Bureau, Victor Building, Washington, D. C.)* is a little manual which everyone should read who is interested in better health with its attendant higher living standards. Repeated polls have shown that the American people—no matter at what level they may be surveyed—want what they understand by

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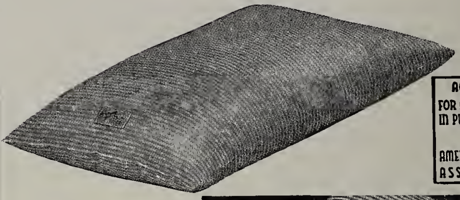

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The Story of Uncle Sam, by William Blender, M.D. ($2.00. *Meador Pub. Co., Boston)* tells in story form what a man who has had a busy life as a country surgeon, farmer, breeder of thoroughbred Hereford cattle, coal mine operator, real estate subdivider thinks of his Uncle and our country.

Methods for Diagnostic Bacteriology, by I. G. Schaub and M. K. Foley ($3.00. *Mosby, St. Louis)* is a complete guide for the isolation and identification of pathogenic bacteria for medical bacteriological laboratories by the people who do this work in the Johns Hopkins Hospital.

Synopsis of Materia Medica, Toxicology, and Pharmacology, for students and practitioners of medicine, by F. R. Davison of the University of Arkansas ($5.00. *Mosby, St. Louis).*

Nursing As a Profession, by Esther Lucile Brown ($0.75. *A Russell Sage Foundation, New York, Book)* deals with the present status of nursing in the United States and ends with a survey of recent trends within the profession. Everyone interested in the work of this noble profession or in the trends of modern medical care must read this little but timely volume.

Biochemistry For Medical Students, by Wm. V. Thorpe ($4.50. *A William Wood Book, Baltimore)* is the second edition of this valuable manual within a little over a year. This speaks for the work.

Synopsis of the Principles of Surgery, by Jacob K. Berman, M.D. ($5.00. *Mosby, St. Louis)* is an attempt to write a good synopsis and thereby to correlate the basic sciences with the principles of surgery. The author has successfully attained his objective.

Applied Pharmacology, by Hugh A. McGuigan, M.D. ($9.00. *Mosby, St. Louis)* is an attempt to connect physiology, biochemistry, and pharmacology of drugs and apply them to clinical practice. A very practical basis for advancement in our therapeutic skill.

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Buckeye News Notes

Alliance—New staff officers of City Hospital are: Dr. K. E. Reighard, president; Dr. H. L. Weaver, vice-president; Dr. George M. Wilcoxon, secretary; Dr. M. A. Schlott, treasurer.

Ashtabula—Staff officers of the Ashtabula General Hospital are: Dr. William J. McCarthy, president; Dr. E. F. Lindenmayer, vice-president; Dr. J. H. Park, secretary-treasurer; Dr. R. B. Wynkoop, Dr. S. H. Burroughs, and Dr. A. H. Pardee, trustees.

Barberton—Dr. Frederick Lahmers has retired after practicing here for nearly 43 years.

Bellefontaine—Dr. L. E. Traull has been reappointed health commissioner of Logan County.

Cardington—Dr. F. M. Hartsook was guest speaker at meeting of the local chapter of the Future Farmers of America.

Cincinnati—Dr. Charles Tabb Pearce has announced his retirement after nearly 50 years in the practice of medicine.

Cleveland—Dr. Elsie K. Snell spoke on "Cancer Control" at a meeting of the Bellevue Business Women's Club.

Columbiana—Dr. Harry Bookwalter, a charter member of the local Kiwanis Club, was honored by fellow club members and civic leaders at a testimonial dinner honoring his 40 years in the practice of medicine.

Columbus—Dr. Harold J. Wilson showed a sound movie of the heart at a meeting of the Optimist Club.

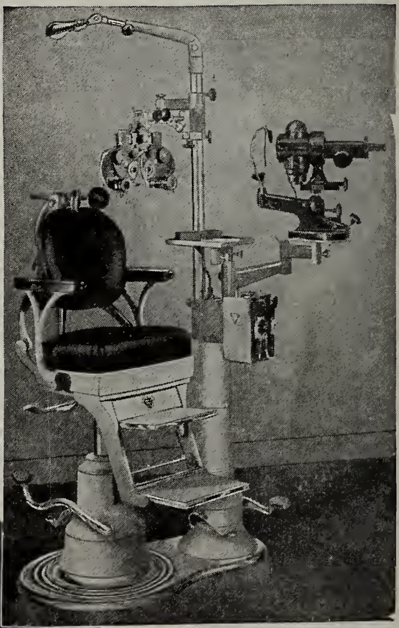
Fostoria—"The Advancement of Medical Science in the Past 30 Years", was the topic of a paper read by Dr. F. H. Pennell at a meeting of the Rotary Club.

Gallipolis—Dr. Charles E. Holzer has been elected a vice-president of the American Forestry Association.

Glouster—Dr. John T. Martin, former local physician, is now a flight surgeon in the U. S. Army, stationed in New York.

Lebanon—Dr. Edward Blair, recently appointed health commissioner of Warren County gave a review of the life of Jeremiah Morrow at a meeting of the Warren County Historical Society.

Lima—"The Layman and Heart Disease", was



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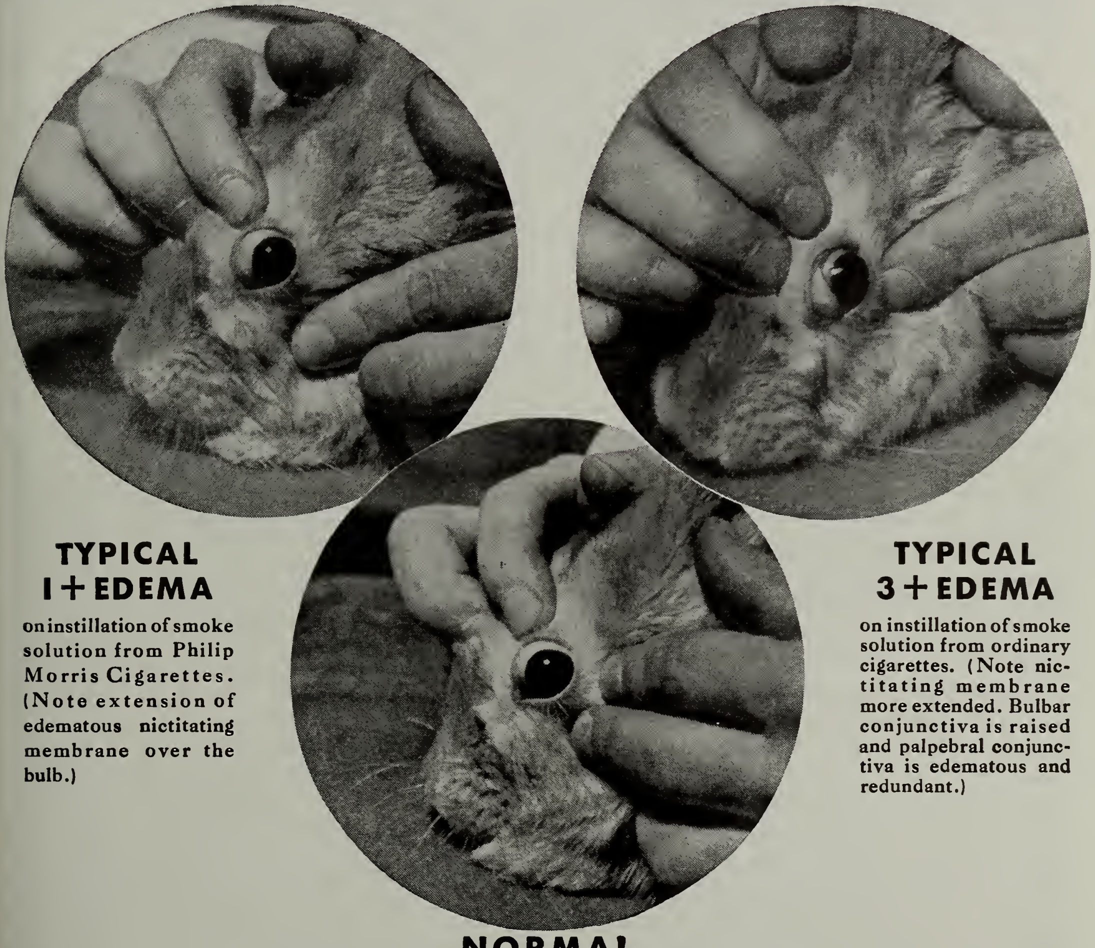
showing the influence of hygroscopic agents in cigarettes on the membranes of rabbits' eyes.*



TYPICAL 1+ EDEMA

on instillation of smoke solution from Philip Morris Cigarettes. (Note extension of edematous nictitating membrane over the bulb.)

TYPICAL 3+ EDEMA

on instillation of smoke solution from ordinary cigarettes. (Note nictitating membrane more extended. Bulbar conjunctiva is raised and palpebral conjunctiva is edematous and redundant.)

NORMAL

CLINICAL CONFIRMATION:** When *smokers* changed to Philip Morris, every case of irritation of the nose and throat due to smoking cleared completely or definitely improved.

**Proc. Soc. Exp. Bio. and Med., 1934, 32, 241-245*
***Laryngoscope, 1935, XLV, No. 2, 149-154*

the subject of a talk made by Dr. F. G. Maurer at a meeting of the Kiwanis Club.

Lorain—New staff officers of St. Joseph's Hospital are: Dr. M. E. Kishman, president; Dr. H. F. Ross, vice-president, and Dr. Hugh Amos, secretary-treasurer.

Mansfield—Dr. Lincoln Fisher spoke on "Modern Treatment of Tuberculosis", at a meeting of the Rotary Club.

Marysville—Dr. G. F. Moench, health commissioner of the combined Delaware county and city health district, is now also health commissioner of Union County.

McDonald—Dr. A. E. Ewing, who recently retired after 37 years of service as assistant surgeon at the local mills of the U. S. Steel Corporation, was honored by a banquet and presented with a wrist watch by mill officials and employees.

Middletown—Dr. W. J. Roehll spoke on "Miracles of Medicine", at a meeting of the Junior Chamber of Commerce.

Norwalk—After practicing here for 52 years, Dr. C. L. Bell recently announced that he will soon retire.

Norwalk—Dr. W. W. Lawrence, city health commissioner, has been appointed health commissioner of Huron County, succeeding Dr. R. P. Scott now on active duty in the Medical Corps of the U. S. Army.

Oak Harbor—Dr. A. S. Mack has been appointed to act as Ottawa County health commissioner during the absence of Dr. C. R. Wood, Port Clinton, now on active duty in the Medical Corps of the U. S. Army.

Piqua—"Prevention and Cure of Heart Disease", was the subject of an address made by Dr. John T. Quirk at a meeting of the Columbian Club.

Seaman—Dr. R. L. Lawwill is the new health commissioner of Adams County.

Sugar Grove—Dr. C. P. Swett is the new president of the Fairfield County Board of Health.

Tiffin—Dr. and Mrs. Frank E. Michener recently celebrated their golden wedding anniversary.

Toledo—New staff officers of Mercy Hospital are: Dr. Fred L. Eyestone, chief; Dr. L. R. Effler, vice-chief; Dr. R. F. Heatley, secretary-treasurer.

Washington C. H.—Dr. John M. Boyd has presented the local high school with a collection of 3,500 artifacts of the stone age. Dr. Boyd started his collection 55 years ago.

Toledo—Dr. Howard Holmes spoke on "Medicine in the News", at a meeting of the Zonta Club.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 March, 1941 No. 3

JONATHAN FORMAN, M.D., *Editor*

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GEORGE H. SAVILLE, *News Editor*

Management of Fits in Adults

CHARLES D. ARING, M.D.

WHAT is my first thought upon entering the presence of a person who is having a prolonged convulsion or a series of convulsions? I am at that moment very slightly concerned about the cause of the attack, or the story of the behavior of the patient prior to the attack, or his heredity, though I may talk of these things to divert the family. I am thinking almost exclusively about how to stop this fit. I have little doubt of my ability to terminate it because my predecessors, who have toiled with convulsions long before they entered my understanding, have placed so many potent tools at my disposal. My only duty has been to know these tools.

STATUS EPILEPTICUS

Convulsions of themselves do not shorten life, except as they may cause some accident, for example, the epileptic who has an attack while swimming. An exception is the condition known as **status epilepticus**, in which the patient has a series of fits without regaining consciousness. This state may be a fatal one unless the seizures are promptly relieved. This is the condition with which one usually is confronted on entering the presence of a patient having a convulsion. Therefore, it is with the immediate therapy of status epilepticus that I would like to begin this discussion.

The prompt ministrations of a physician are a requisite for the patient having seizures, recurring with short intervals between them and with little or no return to consciousness in these intervals. Because of this emergency there are certain drugs that a physician always ought to have in his bag. These are paraldehyde and sodium phenobarbital. Paraldehyde is a remarkably useful drug, particularly in delirium, mania, or in status epilepticus. It resembles alcohol in its effects although it has a more powerful narcotic action. It may be given in large quantities without fatality, and in therapeutic doses it does not affect the heart, respiration, or protein metabolism, and there are no after-effects. It may be given conveniently by many routes, by mouth, vein,[10] muscle, or rectum. The only disadvantage to its use are a pungent taste and fusel-oil odor to the breath which persists for about 24 hours. In an adult having fits it is well to begin the immediate treatment with an intravenous injection of 1 to 2 cc. of paraldehyde, drawn from a stock bottle as the solution is sterile. This therapy usually will result in prompt cessation of the seizures. A second injection of 1 cc. of the drug may succeed after the first has failed, although on rare occasions failure to halt the seizures may result. Occasionally it may be pre-

The Author

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Delivered before Academy of Medicine of Lima and Allen County, Ohio, September 24, 1940.

ferred to begin the immediate therapy with a large dose of paraldehyde, intramuscularly, say 8 to 12 cc., depending on the size of the individual. This dosage should be decreased if the patient has had any other narcotic within the previous one or two hours. This may be all that is needed to halt the convulsion. If the seizures continue, four to six grains of sodium phenobarbital may be given intravenously or intramuscularly, preferably by the route not used for the paraldehyde. With the use of either or both of these medications the fits usually cease, but the patient may remain in stupor. Then a nasal tube may be passed into the stomach so that fluids and dilantin sodium may be administered at regular intervals until the patient recovers consciousness. Dilantin sodium is a potent anticonvulsant and more will be said of it later. If fever accompanies status epilepticus, repeated tepid or cool sponging is indicated.

The case that will not respond to this therapy is indeed rare. If the repeated attacks are jacksonian in type (usually localized to one side of the body), and therefore usually due to demonstrable brain disease (tumor, abscess, syphilis, trauma, etc.), they do not respond so readily to therapy. I have seen two patients having repeated jacksonian seizures literally "convulse to death" despite the use of the best known treatment.

In the absence of paraldehyde or sodium phenobarbital, other sedatives may be used with good effect. Any of the barbiturates may be given parenterally. Morphine sulphate, ether, or chloroform are some of the drugs frequently used. They must be used with caution, however, since large doses usually are required (except morphine where 1/6 to 1/4 grain will suffice) and as they are severe depressants. It must be kept in mind that one of the symptoms to be combated in status epilepticus is coma. Also it should be remembered always that the effective anticonvulsant action of a phenobarbital is not due solely to the fact that it is an hypnotic.

The further diagnostic and therapeutic handling of a patient who has suffered from status epilepticus is the same as that of the person suffering from the usual type of grand mal epilepsy, therefore discussion of this point can be deferred to the discussion on epilepsy.

GRAND MAL SEIZURES

The term **epilepsy** is difficult to define, because it is used to describe the presenting symptom in a group of patients who have repeated seizures of widely different etiology. Like headache, epilepsy is a symptom the cause of which must be dilligently searched for. For our purpose, however, Cobb's[4] definition covers the situation. "Epilepsy is a disorder that causes repeated episodes in which the usual functional results are: (1) Changes in the electrical potential (electroencephalogram), (2) changes in consciousness and (3) nervous discharges into (a) striated muscle, (b) smooth muscle, and (c) glands." A list of 60 or more conditions commonly associated with convulsions has been made.[3] This part of the subject cannot be considered here, since it has been determined to limit this discussion primarily to the therapy of seizures.

DIAGNOSIS

The diagnosis of epilepsy in a straightforward case is a relatively simple procedure. The treatment of such an individual is not so simple. When the patient with fits presents himself to the physician how should he be managed? We owe these patients as much as the knowledge of the subject has to offer. At present the following must be done: (1) An attempt must be made to find the cause of the seizures. (2) The medication that is most efficacious in his case must be determined. (3) The life of the individual must be regulated for his benefit and the benefit of his neighbors.

As regards the first point, a physical and neurological examination (which to be sure, includes an ophthalmoscopic inspection of the optic disc and retina) is the minimum that our patient should receive. The history, whether obtained from the patient or from his relatives, will probably be the single most important factor in the examination. The history should enlighten the physician as to the onset, frequency, and pattern of attacks. The physical examination should be supplemented with an X-ray of the skull, and in most instances a lumbar puncture, particularly if the first attack has occurred outside of the age range during which the majority of convulsive seizures have their onset (i.e., age 1 and 2, and puberty or shortly thereafter. However, it must be remembered that one-third of patients do not begin to have attacks until they are over 20 years of age). The minimum X-ray examination of the skull should consist of a lateral stereogram, and an anterio-posterior view. The cerebrospinal fluid study should include the measurement of the pressure in a water manometer, a cell count (differential, red and white blood cells), a protein determination and a Wassermann. A colloidal gold curve may be done.

If these examinations reveal nothing abnormal, we are ready to proceed to the determination of the medication most effective in the particular instance. Innumerable remedies have been applied to epilepsy. By the test of time three of these remedies remain as outstanding anticonvulsants. The first, and I believe the best, is dilantin sodium. This drug, the anticonvulsant properties of which were first studied by Merritt and Putnam,[9] is unique among the anticonvulsants in that it has little if any sedative action. A 1½ grain capsule given three times daily is the usual adult dose. Our individual may require more or less to control his attacks, the optimum dose for any person may soon be determined by experimentation. Six capsules (9 grains) should be the maximum allowed per day. The drug has a great margin of safety. One of my patients took 105 grains over a period of 10 hours with no serious effects.[2] Dilantin sodium is strongly alkaline and must be taken during or immediately after meals to prevent gastric distress. Dizziness, ataxia, tremors, blurring of vision, diplopia and slight nausea occur in about 15 per cent of the patients using it. These symptoms are common in the earlier weeks of treatment, but fortunately tend to subside in the course of time, or with a reduction of dose. Dilantin sodium is least effective when seizures occur only at long intervals.

ANTICONVULSANT DRUGS

The second potent anticonvulsant is, of course, phenobarbital. Its effect is so well known to you that I will spend no time over it. The long continued use of this drug is well tolerated by most individuals, although the sedative effect usually is readily noted as a reduction of efficiency by many people. The dose of phenobarbital is ½ grain in the child, and from 1 to 1½ grains in the adult.

The bromides, particularly sodium bromide, were used long before phenobarbital and they still have their advocates. Their well known sedative and toxic effects are deterrents to their wide use. In certain instances, however, bromide is more effective than any of the other anticonvulsant drugs. Sodium bromide should not be given in larger doses than 25 grains to an adult, nor should more than 60 grains be given in 24 hours.

Several other drugs may be used as adjuncts to one of the above, particularly belladonna in the form of U.S.P. tincture. In isolated cases it is the drug which will turn the tide. It makes some cases worse. Thyroid extract may be used in the treatment of the convulsions associated with cerebral agenesis and infantilism. Some mention probably should be made of the other forms of therapy which have been used in epilepsy, ketosis and dehydration for example. Since this is a practical discussion for practitioners, it has been limited to potent therapies applicable to the majority of patients.

Some of the anticonvulsant drugs can be used in combination. Dilantin sodium may be complemented with phenobarbital, and the two drugs acting together may relieve fits, which were unaffected by either drug alone. The physician must feel his way along and must not resign the patient to the catastrophic episodes of grand mal epilepsy until he has run the gamut of medicines. It will usually help to take the patient into one's confidence about the capriciousness of anticonvulsant drugs, lest he stray away before he has had a thorough trial of them.

Once the patient has been established on an anticonvulsant drug that is effective, this drug should never be suddenly withdrawn. There is no more certain way to encourage the development of status epilepticus than by discontinuing or changing the anticonvulsant medication that has controlled the fits of an epileptic. In fact, people subject to seizures don't stand any abrupt change or excitement well. Sudden change from the sleeping to the waking state may induce a fit. Etherization is a case in point. Every now and again someone will report a case of "ether convulsions" so-called, as though it was a distinct entity. Persons with "ether convulsions" presumably have a predisposition to convulsive seizures, if they have never previously had a fit. Sudden change in physiological mechanisms by etherization induces convulsions in some persons who are predisposed to fits. There are many reasons why patients subject to epilepsy should live moderately. If for any reason an effective anticonvulsant must be discontinued in an epileptic, it must be done very gradually, and another drug substituted while the original is being withdrawn. Even with great care in withdrawing and substituting anticonvulsants one may induce convulsions in some instances, and if so, the original medicament must most certainly be restored as quickly as possible.

OTHER FACTORS IN TREATMENT OF CONVULSIVE SEIZURES

We now proceed to the third factor in the treatment of convulsive seizures, and that is, the regulation of the life of the individual. This can be simply summed up by saying the patient should live as normally as society and his disease will allow him to live. You need only imagine yourself the victim of fits to determine in what the regulation should consist. Would you agree to be deposed from education, occupation and recreation, as many of these people are, often for no better reason than that their fits affect the sensibilities of others? The answer can be safely left to your own reactions, if you have any imagination. Young persons afflicted with convulsions should continue in school. If school authorities object, it falls to the duty of the physician to try to enlighten them. The trouble arises because of the disturbance that a fit may cause in a classroom. The usual objection to a child who is subject to convulsions, is the psychic trauma that he engenders in the other little angels about him. Children with normal mentality will accept much about which they are given a reasonable explanation. It requires a bit of effort on the part of the teacher or parent, and if they are not willing to give it, it may be the case that they are not mentally equipped for the task. In that event the overworked physician must do a bit more social service.*

If persons subject to fits are in such occupations that the seizures endanger the well-being of others one has no choice but to recommend discontinuance of that occupation. Epileptics at present can hardly be advocated as fit to drive automobiles, though I personally believe they would not be likely to add to the carnage that the so-called "normal" driver is now wreaking. Swimming, cycling and boating may be interdicted if one wishes to allay the fear of relatives, and reduce one's own responsibility. I would rather request that such activities be done in the presence of others who know of the condition from which the patient suffers. I have yet to have any serious accident result from this program. It is a well known fact that the person subject to seizures have a smaller number of them in a normal environment than in a restricted one.

We have definite knowledge that the ingestion of any alcoholic liquors increases the incidence of attacks in persons subject to seizures. Therefore the use of alcohol must be interdicted.

The person afflicted with convulsions needs encouragement, and there is no one in our society better fitted to encourage under these circumstances than the physician. This, one may do honestly. A patient may with reason hope he will "outgrow" the worst of his seizures, but this cannot be promised. Some studies[6] indicate that in the process of acquiring the muscular inflexibility of age, the person tends to lose his seizures. As the patient moves out of adolescence, attacks also become less frequent. This is especially true of petit mal, which will be discussed later.

With the intelligent patient it is well in this disease as in others, always to hold out the hope of something better, for the reason that many keen minds are on the trail of his disease. It is not without the bounds of probability that a cure may be found for any of the chronic or hopeless diseases tomorrow. It is well to inform the thinking person accordingly, for he must have hope to live a reasonably happy life. There is nothing quite so terrible in the everyday life of an individual as these catastrophic episodes which may occur at any time, and which are looked upon with such horror. The business of attempting to adjust an individual to his fits is indeed a difficult one. Few accept them gracefully, an attitude that we can readily appreciate. Working along this line, I have encouraged all of my intelligent patients to join the "Laymen's League Against Epilepsy", whose offices are at the Harvard Medical School.[8] The object of this organization is to educate the public interest in the problem of epilepsy and in providing funds for its solution. If anything can induce adjustment, it seems to me that the crusading spirit engendered by membership in such an organization may do it.

Finally the question of which of these individuals should be sent to institutions needs consideration. The answer is, those with low intellectual levels who are having many fits despite medication. In Ohio we have little choice of institutions for the care of epileptics. Any of the private mental sanitariums will accept these people. If the patient is free of psychosis the only public hospital which will care for the epileptic in a custodial manner is the State Hospital for Epileptics at Gallipolis. This institution is full to overflowing and the waiting list is long. The public is not well informed about the relationship of epilepsy and the mental state. It has been bruited about that convulsions invariably lead to mental dilapidation. This is not true, since approximately two-thirds of patients suffering from epilepsy in the community are of normal intellectual attainment. Probably more individuals with epilepsy are retarted by continuous sedation rather than by their fits. Amazing instances of return to sanity have been recorded[5] since dilantin sodium has been used as an anticonvulsant in the stead of drugs that are sedatives.

PETIT MAL SEIZURES

The therapy of the various kinds of seizures not yet discussed will be considered briefly. We have already mentioned status epilepticus and the common variety of grand mal epilepsy. **Petit mal** are the most frequent of seizures, and are often present for months or years before convulsions occur. Their therapy is not very satisfactory. The anticonvulsant therapies should be juggled about in an attempt to find something that may benefit the patient.

JACKSONIAN SEIZURES

Jacksonian seizures are named after Hughlings Jackson, the English neurologist, who described them so clearly. In this type of seizure the attack begins in one part of the body, usually in the face, fingers, or the toes. The convulsion may remain localized or it may spread and the patient may feel the numbness advance, or watch the twitching progress up an extremity. If the convulsion spreads to the other side of the body the patient may lose consciousness and the attack become a grand mal. It is extremely important to recognize a jacksonian seizure because it indicates the point from which the disturbance is arising in the opposite cerebral hemisphere. The cause of the disturbance can usually be determined and removed. If it is not relieved it may progress and result in death (e.g. tumor, scar, abscess).

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* "The doctor's profession is, in part, an art, since it deals with matters that demand manual skill, in part, again, it is a branch of that vague middle ground between the physical and the psychological, in which emotional intelligence and great sanity of judgment are required; it is, like all biology, an application to an unlimited variety of problems of the reasoning and techniques of all available science".—Hans Zinsser.[11]

The treatment of jacksonian seizures usually is eventually surgical, although it is well for the patient to have had a trial of dilantin sodium, phenobarbital, or bromide before the operation. One then has some index by which to judge the efficacy of these drugs after the operation. However, this trial of drug therapy should not delay surgery, where it is indicated.

PSYCHOMOTOR SEIZURES

Psychomotor epilepsy (psychic equivalents) is not well known, and its manifestations are protean. The patient with psychomotor epilepsy slips into a somnambulistic state or an amnesia, in which he does things for which he has no memory later. In an attack he may walk about mumbling and picking at his clothes or he may commit some overt act. During the seizure he may appear to be normal to the casual observer. The amnesia of psychomotor epilepsy may last for long periods, and the person may travel great distances and regain his senses in a distant city. The patient is usually morose during the attack, but may be violent. The pattern of the attack is usually the same from time to time. There may be some convulsive movements in the attack and these usually consist of tonic spasm, or twisting of the body accompanied by some suffusion of the face. There may be no fall and there never is the clonic, jerking movements of the grand mal type. The seizures may be so mild that they pass entirely unrecognized. A psychic seizure may be manifested as a period of altered disposition or of aggressive behavior, entirely foreign to the nature of the individual. Some cases of unrecognized psychomotor epilepsy in children have been considered to be "behavior problems". The borderline between psychic seizures and other disorders of behavior is not clearly drawn. If the patient suffers from grand mal or petit mal in addition to the psychic equivalents, or if an electroencephalogram is made, the diagnosis usually may be made.

Brilliant results have been obtained in psychomotor seizures with the use of dilantin sodium. It is extremely dramatic to see a potential murderer changed into a useful citizen practically overnight. This has been my happy experience, and may be possibly yours if you are on the alert for this type of patient.

The description of the latter two types of seizures (jacksonian and psychic) has been appended to this article which is primarily concerned with therapy, because their manifestations are not well known.

OTHER TYPES OF SEIZURES

There are other conditions that may be confused with epilepsy. These are various kinds of attacks which are either just a variety of epilepsy or are closely related either biologically or in appearance to it. The most important or common of these are sympathetic seizures, behavior disorders, migraine or sick headaches, narcolepsy, fainting, carotid sinus reflex, and hysteria. This is not the place for the discussion of these conditions, which are considered in several of the publications of Lennox.[8] The relationship between epilepsy and migraine might be mentioned because of the frequency of the latter. It would seem difficult to relate attacks of headache and of convulsive movements at first glance. The principal reason for connecting the two is statistical. This point has recently been studied[8] for 302 patients who came for treatment of migraine and 1800 who came for treatment of epilepsy. It was found that patients with migraine had epileptic seizures 12 times more frequently than persons in the general population and patients with epilepsy had migraine twice as frequently as persons in the general population. Among the near relatives of persons with migraine, epilepsy is two thirds as common as it is among the relatives of epileptics.

INCIDENCE OF CONVULSIVE SEIZURES

It is not well known that the disease affects a large proportion of the population. One out of every 200 men were rejected in the 1917-1918 draft because of having a history of seizures. Many men suffering from the disease or a predisposition to it were missed in this rejection. This is indicated by the fact that epileptics constituted 5 per cent of the veterans with neuropsychiatric disturbances who were examined over a period of one year (1936-1937) in the Cincinnati Regional Office of the Veterans Bureau.[1] However, 0.5 per cent of the population is about the figure obtained by asking students and nurses about their families. This means that there are approximately 600,000 persons in this country who are or have been subject to seizures. The importance of the disorder is multiplied if one realizes that for each person that has epilepsy there are about 20 who have a predisposition to this disorder.[7] Therefore, every tenth person in the United States is, or should be, personally interested in the solution of this problem.

HEREDITY AND CONVULSIVE SEIZURES

Though the opinion that heredity is an important influence in epilepsy is widespread, only one epileptic person in five is able to name any relative who has been similarly affected. However, like an underground stream, the predisposition to seizures can flow unrevealed and unsuspected through numerous generations and then suddenly, assisted perhaps by some injury to the brain, appear in a certain individual as epilepsy. This predisposition is carried in abnormal genes and only recently has been demonstrated in the clinical laboratory. It is believed[7] that abnormal brain waves characterize the electroencephalogram of patients suffering from grand mal, petit mal epilepsy, or psychomotor epilepsy. Lennox, Gibbs, and Gibbs[7] made electroencephalographic tracings over six areas of the cortex in 138 parents, children or siblings of patients with epilepsy. Abnormal records were obtained in 54 per cent of the relatives, against 6 per cent in a control group who were unrelated to epileptic persons. In 46 of the families, records were made of both parents. In 28 per cent both parents and in 94 per cent at least one parent had abnormal records. This indicates that the dysrhythmia of epilepsy is inheritable and that such a dysrhythmia when demonstrable may represent a predisposition to epilepsy or some allied disorder. These observations should be of practical value in the prophylaxis and eugenics of epilepsy and should assist the physician in tracing the descent of epilepsy and in advising patients and their relatives about marriage.

THE TERM "EPILEPSY"

Possibly some mention should be made of the frequent use of the term "epilepsy" in this discussion. It has been said that the term is unsatisfactory because it mentions a symptom and does not suggest the cause of the symptom. This same criticism can be applied to any term that has been suggested as a substitute for epilepsy. Another objection to the term is that the word carries a bad connotation with it. If we were to banish all terms with bad connotations from our language (medical and otherwise) we would be relatively expressionless and no better off. We cannot relieve the horror by striking out a word. I think, it may be taken as a fair policy, that in a democracy a person be allowed to use any term as long as he understands its meaning and uses it with reasonable accuracy. This is particularly true of medical terms against certain of which, too much profitless energy has been extended.

In conclusion it may be said that each patient who comes to you complaining of fits, regardless of their nature is a challenging problem. It often taxes the ingenuity of the best of us to determine the cause of the fit, and too frequently we are left without an explanation. Each patient is a singular and individual problem, which may be brought to a satisfactory conclusion, with the possession of the meagre information on the subject that is at our disposal, plus a modicum of dilligence. The advent of the electroencephalogram,[7,8] and of the anticonvulsant dilantin sodium[9] has widened the vista, and we may reasonably expect our knowledge to improve with the future.

It has been the attitude of the profession to allow the burden of the fight against epilepsy to fall on a few men. Possibly this is as it should be, but the least we can do to aid their work is to encourage reasonable political and financial support. A disease which ramifies through the population as does epilepsy deserves more attention than it is getting.

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Urography

As compared with the retrograde method of examination, subcutaneous urography does not produce quite such dense shadows nor as satisfactory visualization of the urinary tract. However, intravenous urography is similarly slightly inferior to retrograde. It is an alternative to the intravenous method that we must consider the subcutaneous route. We are in agreement with those who have already reported their experiences. We have found that the shadows of kidney pelves and calices, as well as ureters, have been in practically all cases fully as satisfactory as those obtained by the intravenous administration of the dye. Gas shadows have occurred no more and no less frequently, and roentgenograms of diagnostic quality have been obtained consistently. In short, the method has been satisfactory.—Jacob H. Vastine, II, M.D. and D. Alan Sampson, M.D., Philadelphia; Pa. Med. Jour., Vol. 44, No. 5, February, 1941.

A Report on Eleven Years Experience in The Treatment of Varicosities and Sequellae of The Lower Extremities

GEORGE B. WATSON, M.D.

ELEVEN years ago I took over the "Leg Ulcer Clinic" at the University Hospital (and St. Francis Hospital), at that time a very active clinic, operated in conjunction with a number of hospital beds contiuously occupied by leg ulcer cases. At least ten beds were in constant service at the University Hospital, with another 16 or 18 in continuous use at St. Francis Hospital. There were being seen in the Out-Patient Clinic approximately 60 ulcer patients a week.

Fully 90 per cent of these leg ulcers were varicose in origin, and no treatment was quite satisfactory. The injection method had not yet gained universal acceptance, so that it was necessary to hospitalize a considerable proportion of these individuals, elevate the extremity and encourage more efficient circulation by diverse methods with which all are familiar. If radical treatment was decided desirable, surgical removal of segments of the veins was resorted to, and we all know how unsatisfactory were the results of this procedure. For those patients who found it necessary to remain ambulatory, or for whom hospital accommodations were not available, a variety of heroic methods were experimentally employed, as numerous as they were unsuccessful.

A few months later we became interested in and adopted the injection form of treatment. progressing through several years of the use of dextrose and sodium chloride, then sodium morrhuate, and in the last two years, a more recent development, sylnasol, which we have found more nearly approaching the ideal solution for this purpose.

ETIOLOGIC FACTORS

The incidence of varicosities of the lower extremities is approximately 10 per cent in adult individuals, with a much higher frequency in females than males. We have come to regard heredity as a factor of considerable importance, since in reviewing a large number of histories over the past 10 years, we have found that either the parents or grandparents of a majority of these patients, or frequently both, had suffered from this same and associated conditions. We consider the inherited factor a definite weakness in the valves which occur at intervals along the vessel walls. These valves, the function of which is to support the venous column of blood against the pull of gravity, if congenitally weak, break down when subjected to undue strain, allowing the venous current to become sluggish, with locally increasing venous pressure, and the resulting dilatation and tortuosity which we know as varicosities.

The Author

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In the female, child-bearing is, of course, the greatest precipitating factor, and I should estimate that at least 80 per cent of varicosities in women are initiated during pregnancy, directly the result of the compression of the iliac veins by increased intra-abdominal pressure, as well as mechanical obstruction by rapid uterine enlargement. The severity of the varicose condition is usually in proportion to the number of pregnancies.

The causative factors most frequently seen in the remaining 20 per cent of cases occurring in the female are pelvic tumors, phlebitis following injury or postoperative infection, influenza or other severe acute infectious diseases, severe chronic constipation, heavy work involving constant lifting, circular garters or other constricting wearing apparel, and improperly fitted shoes. In the male, of course, some of these same factors may be involved.

ANATOMY

Anatomically, the veins of the lower extremity which carry the return flow of blood to the heart are divided into five groups, (1) deep veins, (2) superficial veins emptying into the femoral, (3) superficial veins emptying into the popliteal, (4) superficial and deep veins emptying into the external iliac, (5) communicating veins connecting deep and superficial venous systems. The deep veins accommodate a much greater volume of the return flow than the superficial group.

Varicosities may occur in the deep as well as the superficial systems, but changes in the super-

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Submitted November 12, 1940.

ficial veins are by far the more frequent, probably due to the fact that the deep vessels are closely surrounded by muscles and more dense connective tissue which gives them considerable support, while the superficial veins lie in loose connective tissues and subcutaneous fat, easily pushed aside by any tendency of the vein to dilate and become tortuous.

The superficial vessels with which we are most concerned may be divided into two groups, those below the knee and those above. Although varicosities most frequently start in the group below the knee, and progress upward, treatment of the veins between the groin and the knee seems to be most important in the permanent obliteration of veins in both regions.

SYMPTOMATOLOGY

Pain, swelling and disability resulting from varicose veins of the extremities constitute a very important consideration from an economic viewpoint. We depend to a major extent upon locomotion to accomplish our daily activities, and when this function is interfered with by vague myalgias, or the other extreme, secondary ulcers, our efficiency is materially diminished.

The most frequent manifestations which cause the patient to seek medical relief are, in the order named, mild discomfort, actual pain, swelling and edema, frequently progressing to ulceration induced by trivial traumatisms, and often associated with a chronic dermatitis, so-called varicose eczema.

Most frequently easy fatigue, progressing to actual pain, is the first symptom, coming on two to three hours after the patient is up and on her feet. Dull at first, the pain may become acutely sharp and stabbing in character, finally forcing the individual to lie down and elevate the extremities. In this stage, the varicosities may be either small and scarcely noticeable, or large and profuse.

This discomfort reoccurs daily. Frequently it extends into the lower back and sacral region, causing alterations in weight-bearing, definitely aggravated by high heeled shoes. Many of these patients suspect a foot deformity, and adopt the use of arch supports and various other devices in an effort to obtain comfort. In fact, we frequently regard defective arches and faulty weight bearing as an important causative factor and devote considerable attention to the proper correction of these conditions.

Swelling is next in frequency. It may be confused with that resulting from cardiovascular renal disease. It can be differentiated, however, by the character of the swelling which is full and brawny, does not pit on pressure, and of a dusky color which probably results from the deposition of hemoglobin pigment, due to disintegration of the stagnated blood cells. The most important distinguishing fact is that with elevation of the extremities, the swelling disappears, only to recur in a short time after the erect posture is resumed. The swelling may be so severe as to entirely obscure the varicosity, which, in that case, can be distinguished only after the legs have been elevated or compressed by means of elastic binders.

If the swelling and pain appear to localize in the vicinity of a joint, an arthritis is frequently suspected, and many of these patients recite a history which includes various measures directed at the treatment of joint inflammation. Even though actual pathology in the joint does not appear to be present, this situation may be a source of considerable confusion.

Next in frequency we see chronic ulceration. It is my impression that this complication occurs in approximately 50 per cent of all varicosities of the lower extremities. The ulcers appear most commonly in the lower third of the leg, either medially or laterally, and are usually precipitated by an inconsequential injury such as a scratch or an insect bite, although they often develop spontaneously. Due to the impaired circulation, they rapidly increase in size, on the surface as well as deeply, are usually cyanotic in color, become infected by multiple lowgrade bacteria, develop a pale malodorous exudate, and are very tender and painful to touch. The edges are irregular and indurated, and the exudate becomes profuse, necessitating frequent dressings. They may progress in size to involve one-third to one-half of the leg area. The adjacent swelling may be sufficiently severe to entirely obscure the offending varicosity.

A frequent late manifestation is "varicose eczema" which once started, may spread rapidly to involve the entire skin surface of the leg, well above the region of the varicosity. It is definitely related to the deficient circulation and is self-limited approximately to the region of the varicosities. Usually it presents a red, inflamed surface with a weeping, fetid exudate. It is not contagious or transplantable.

TREATMENT

It is, of course, a well accepted fact that any individual or tissue presenting a deficiency of circulation, whether due to obstruction or inactivity, is more susceptible to bacterial invasion with resultant pathologic changes, than one in which the circulation is normal. Therefore, it is obvious that any procedure which increases the velocity and efficiency of the blood stream, proportionately increases resistance to infection and limits the progress of the invasion. Our purpose, then, is to employ whatever methods appear most successful in achieving this objective, with first attention devoted to correction or removal of those factors responsible for the circulatory stasis.

In the various ulcer cases, our primary consideration is healing of the ulcers. Due to the circulatory stasis, they do not respond to the usual forms of medication. In fact, simple dressings and germicidal ointments often seem to make them worse. In my experience best results have been obtained by the application of overlapping strips of two-inch adhesive tape, applied snugly from the toes to the knee, and left in place or renewed over a period of five to six weeks. Irritation of the skin or ulcer surface by the tape may be eliminated by the use of collodion or tincture of benzoin compound. With this method, combined with vein injections, healing takes place in an average of six weeks without subjecting the patient to recumbency. If the ulceration recurs later, it is much smaller and the swelling is much less extensive, due to the establishment of more adequate collateral blood and lymphatic channels. The adhesive strapping is reapplied and healing takes place much more promptly.

We adopted the injection method at first as a means of preventing the recurrence of ulcers. Initially we used the dextrose and sodium chloride solution then popular, and found it fairly satisfactory with the exception of such complications as painful local reactions, sometimes disabling in degree, and necrosis with sloughing if the solution found its way into the perivascular tissues.

With the introduction of sodium morrhuate, we found it less objectionable from a standpoint of local complications, and used it routinely until approximately two years ago. We did, however, observe anaphylactoid reactions, varying in degree from extremely mild ones to others of quite alarming severity. These patients usually gave a history of fish sensitivity or intolerance, or the sensitivity developed after 12 or 14 injections given at weekly intervals. It was also interesting to note that after several months of treatment with sodium morrhuate, occasionally a dietary fish intolerance was induced. In these reactive individuals, we reverted to the use of small doses of dextrose and sodium chloride.

Two years ago, I became acquainted with sylnasol, a 5 per cent sodium salt solution of the fatty acids of vegetable oil extracted from the psyllium seed. Upon adequate trial, I observed somewhat better sclerosing action with perhaps slightly smaller quantities of the solution, and in following up these cases, I noted a lower incidence of recurrences. Over this two-year period, we have now treated more than 500 cases with sylnasol. I have observed four mild reactions, the sensitivities developing after a series of injections involving a minimum total of 70 cc. of solution, and following an interval or rest period of six weeks.

With sylnasol, local reactions have been much less severe. When observed, they present a slight burning sensation for one to two hours following the injection, and then a mild general soreness in the region for two to three days. In no case has the tenderness been disabling, and I have not encountered any necrosis or sloughing, even when the solution is infiltrated into the perivascular connective tissues. In general, I feel that sylnasol furnishes a safer sclerosing agent than those previously used, and one less inclined to produce unpleasant manifestations.

With this solution, we do not hesitate to treat pregnancy cases during the period of gestation, up to and including the eighth month. We feel that these cases should be treated, and that their extremities are in much better condition following delivery if the progress of their varicosities is prevented by treatment during pregnancy. The amount of solution is the same, and the procedure does not differ in any way from that used in the treatment of non-pregnant individuals. I have not encountered any cases in which the injections have unfavorably influenced the pregnancy.

TECHNIC

The first injections are made into the most prominently involved veins high up in the groin, depositing approximately 2 cc. of sylnasol at each vein site. Subsequent injections are placed progressively lower down at intervals of four to six inches. Treatments are repeated weekly, and several veins are injected at each treatment, using up to a total of 10 or 12 cc. of solution.

The injections are made with the patient standing, and no occluder, tourniquet, or other method of retaining the solution locally is employed. I regard this as unnecessary, due to the stagnant state of the circulation in these veins. Occasionally I do attempt to massage the solution distally, but this frequently is unnecessary because of the reverse direction of flow in many of these varicosities.

We do not employ ligation routinely, but rather hold it in reserve for those cases in which proper sclerosis is not obtained after a trial with the first few injections. We believe that this decision also depends upon the size of the major varicosities, and the occupation and activities of the patient. During the last year, out of more than 200 cases we have found ligation necessary in only 12 which failed to respond to obliterative efforts by injection.

Treatment is continued until all varicosities both above and below the knee have been occluded, and all swelling has disappeared. Thereafter each patient is seen monthly for five or six months and then followed up with examinations every six weeks for 18 months. If recurrences appear in this period of time, additional injections are made.

I find it much more satisfactory to handle these patients on a flat rate basis, providing for complete treatment and follow-up observation extending over one and one-half years after the last injections are made.

With this plan of treatment, my results have been uniformly satisfactory. The swelling in the involved area promptly subsides and varicose eczemas clear up as the circulation improves, while ulcers heal in a surprisingly short period of time. It is extremely rare that we find it necessary to hospitalize or confine a patient to bed in order to achieve the desired improvement.

Perhaps I should comment upon ulcers other than varicose. About 4 per cent of our ulcer patients have shown positive Wassermanns, making it apparent that the luetic condition contributed to that resulting from the varicose state. In these cases, both forms of treatment have been carried on simultaneously. In addition to the obliterative therapy, continuous antiluetic treatment has been administered, consisting of alternate courses of 10 intravenous injections of neoarsphenamine followed by 30 intramuscular injections of aqueous bismuth sodium tartrate. Under this management, the ulcers, whether predominately varicose or luetic, have undergone rapid granulation and healing.

In conclusion, I should like to emphasize the importance of the early adoption of the injection method, the importance of adequate treatment with reinjection if necessary, and the necessity of following these cases by routine examinations every four to six weeks for a minimum period of 18 months. I feel that our experience demonstrates that this plan will eventually make varicose ulcers a medical curiosity of the past.

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Fulminating pulmonary tuberculosis, such as miliary tuberculosis is rather infrequent among persons in better circumstances, while fibroid phthisis is more likely to occur among persons under better economic surroundings. Extremely acute manifestations of rheumatic infections are relatively infrequent among the better-to-do, while the more chronic type of fibrosing mitral stenosis is more likely to occur. In both tuberculosis and rheumatic fever these differences are conditioned by better treatment, ability to obtain more rest, less arduous occupations and many other considerations.—O. F. Hedley, Pub. Health Rep. Oct. 11, 1940.

Control of Genito Infectious Diseases

There is a group of men who have a single sexual partner with whom they have more or less regular contact and, when one of this type is found to have a venereal infection, he expresses great surprise that his contact had been receiving other men. When questioned as to the kind of protection he used to prevent an infection, his reply often is, "I did not think any protection was necessary as I have not had intercourse with any other girl for months." A surprisingly small number of men admit the use of a rubber sheath.

There are but few men who will use any form of self-disinfection following sexual relations, save soap and water, even in the presence of a prostitute, as he thinks, and often so expresses himself to the effect that he doesn't want to offend the girl with whom he has had intercourse. Surely men cannot be expected to apply an ointment or use an injection which causes irritation or will stain the fingers or clothes. If an attitude of chivalry is interfering with the early and prompt use of prophylactics, then the results of the information regarding the dangers of gonorrhea and syphilis in prostitutes and casual acquaintances have not been commensurate with the efforts and money spent upon them. If the men who visit the prostitutes fail to take precautions for cause, the men who seek clandestine partners conceivably may have the same thought to an exaggerated degree. Is it possible that chemical prophylaxis in theory has over-reached its practical value as an indispensible weapon in the venereal disease offensive? In our efforts to prevent the dissemination of gonorrhea and syphilis we have failed not for moral or medical reasons but because of the sheer indifference and carelessness of the people. Apparently men will not avail themselves of this method of protection unless forced to do so by fear of punishment or exposure to a known source of infection. Even in the armed forces, when contraction of a venereal disease brings severe penalties, many soldiers will take the risk of becoming infected rather than reporting for early preventive treatment. I realize that there are no satisfactory measures which the woman may use aside from protection with a condom at the time of exposure save antiseptic and cleansing douches afterward. The answer to my question: "Why isn't prophylaxis a factor in the control of venereal diseases?" is a "lame and impotent conclusion"—indifference on the part of the people.—Walter M. Brunet, M.D., Chicago; Va. Med. Monthly, Vol. 68, No. 2, February, 1941.

The battlefields of the spirochetes are the blood vessels of the brain.—Fetterman.

Urology in War

VICTOR C. LAUGHLIN, M.D., F.A.C.S.

UROLOGY is the study of the abnormalities of the genito-urinary tract in the male and the urinary tract in the female of all ages. It embraces therefore the study and treatment of venereal disease, a major problem in any armed force.

From the very inception of the organization of armed forces when large numbers of men are being thrown together in concentrated areas, until the time when they are finally discharged from service, urology plays a very important and vital role for the maintenance of health, man power and striking force.

In comparatively recent years important strides have been made in the campaign directed against the ravages of venereal disease infections. This has been accomplished largely through lay education, prophylaxis and improved methods of treatment. The Medical Corps of the United States army is proud of the progress it has made along these lines in the same period.

The loss of effectives, that is, the reduction of fighting personnel as a result of these diseases can become serious. The development of greatly simplified methods of treatment, made possible by more accurate knowledge regarding the nature of venereal disease, has made possible the thorough treatment of these cases without the evacuation of the soldier from his training area. This relieves the General Hospitals in the Base Areas and obviates the necessity for setting up special hospitals for the care of this type of illness.

The most important part of the venereal work of the urologist in war and in the pre-war period is treatment. However, of equal importance is the problem of prevention of these diseases. This problem arises as a result of the tremendous masses of men that occupy whole sections of a country and mingle intimately with the civilian population.

During World War I, thanks to the foresight and splendid cooperation of General John J. Pershing and a very strenuous campaign carried out by an alert and efficient Medical Corps, the venereal rate of the entire American Expeditionary Force was held to the remarkably low figure of 16 per 1000 men per year. To accomplish this unusual feat a vast program was introduced by the urologists. This program included; (1) Social Hygiene; (2) Prophylactic Treatment; (3) Physical Inspection of Troops; (4) Repression of Prostitution; (5) The Reporting of Sources of Infection and Dispensary Treatment of Civilian Population; (6) Enforcement of Laws Relating to Alcoholism; (7) Court Martial for Venereal Diseases, and (8) Treatment of Venereal Disease within the Organization in order to reduce the loss of effective strength and to avoid making venereal disease an excuse for escaping duty.

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Shortly after the A.E.F. arrived in France the question as to the advisability of having army houses of prostitution was advanced. In the minds of some was the belief that regulated prostitution offered the best means of combating the spread of venereal disease. In theory the idea promised much. In practice, however, it works out poorly. Such a plan therefore, although officially submitted, was never adopted.

All is not venereal disease that shows discharge at the external urinary meatus. Tuberculosis of the genito-urinary tract, new growths and foreign bodies in the channel are likewise among the more common causes of this very embarrassing symptom. When considering the subject of venereal disease most people are prone to think only of syphilis or of gonorrhea. Some individuals have a vague idea about one or the other disease, feeling that they are related in some way. Still others have heard the term chancre or chancroid but few realize that there are at least five or possibly six separate and distinct venereal diseases—viz: gonorrhea, syphilis, chancroid, granuloma inguinale (granuloma tropicum, granuloma venereum), lymphgranuloma inguinale (lymphopathia venereum, lymphogranulomatosis inguinalis) and non-specific urethritis.

In this country during World War I the venereal disease rate among troops was much higher (than 16 per 1000 per year) and varied greatly in different outfits. This was principally due to lack of coordinated action on the subject and the fact that there was no such plan in process here as we have described for the A.E.F.

It may be safely stated that venereal disease

Submitted December 21, 1940.

is one of the scourges of army life. Sexual indulgence by young unmarried men is responsible for an immense amount of disease and suffering not only among the men themselves, but also in later years among their wives, to whom they give the disease, although they may believe they have been cured, and among their children, to whom the malady may be transmitted even before birth.

Abstinence from sexual intercourse is the only sure means of maintaining sexual purity and hygiene. While it is a common belief that the sexual act is necessary to maintain the health or powers of man, this is a fallacy. It has no foundation in scientific fact.

If in spite of the moral and physical prohibitions against it, illicit sexual intercourse has been indulged in, then a prophylactic treatment must be taken. This is for the benefit of the person himself and for the good of the group as a whole. In the army this is required and the neglect to do so is punishable by court martial.

The efficiency of the prophylactic treatment depends upon two factors. The thoroughness of the treatment and the interval of time elapsed between exposure and prophylaxis. Treatment should be taken as soon after intercourse as practicable, certainly not later than two hours after.

NEGROES

Nearly 10 per cent of our military forces are to be selected from the ranks of the negro and the success or failure of our army may be determined to no inconsiderable extent by his efficiency. We must give attention to the public health problem of the negro soldier as the control of venereal diseases in these individuals will have in this mobilization, as it did in the World War, a real influence on the welfare of all our troops.

In the health problem of the negro venereal disease looms large. The incidence of venereal disease is greater among negro troops than among white. In one camp in 1917 more than 90 per cent of the colored non-effectives (sick) were venereal, practically all having contracted the disease before entrance into the army. Most of these cases were chronic.

Syphilis is more prevalent among colored enlisted men than among white enlisted men. In the army in 1917 the rate for syphilis was about four times as great in colored as white troops, for chancroid four and one-half times as frequent and for gonococcus infection two and one-half times.

Combining the data of the last ten years the rate for all venereal disease for colored troops is a little less than double that for white. The difference is probably due partly to a difference in social pressure, and partly to a difference in ability to control the sex instinct.

While the venereal disease program is an extremely important part of the work of the urologist at war it is nevertheless not the only problem which occupies his attention. The surgery of the urogenital tract is of equal importance.

In one large series of penetrating wounds of the abdomen received (2121 cases), wounds of the kidney occurred in seven per cent. Rupture of the kidney was a common finding. Such injuries result from the explosive effect of a bullet traversing the organ, from concussion a result of injury to adjacent vicera or from crushing blows. Through World War experience and the improved methods of diagnosis developed since that time the urological surgeons have been able to develop methods of determining with great exactitude the position of a foreign body relative to the kidney or ureter. The great danger incident to wounds of the kidney is hemorrhage. The arteries of the kidney are terminal arteries. Division of one of the main branches usually results in hemorrhage and death unless arrested by operation very early. Extravasation of urine is another important danger.

Ureteral wounds are a comparative rarity although many such injuries may be overlooked. Immediate repair by suture is the ideal treatment for these severed ureters. When this treatment cannot be carried out cutaneous ureterostomy can be done. This will serve the patient until such time as nephrectomy can be done, provided it is found necessary. Seldom is a plastic operation to restore the continuity of the ureter possible under conditions of war. When such operations are done they are usually performed in a General Hospital in the Base Area.

During World War I, it was found that injuries to the bladder occurred frequently among abdominal injuries. The more severe of these injuries die before anything can be done for the patient. Bladder injuries are usually complicated by injuries to the bony pelvis or spine and particularly the intestine or rectum. This greatly increases the likeliness of severe infection, osteomyelitis, abscess and fistula formation. Many of the fistulae connect with the bladder and cannot be recognized except by cystoscopy. Foreign bodies, missiles and pieces of bone in the bladder are also discovered in this way.

Perforation of the intestine is the most frequent intra-abdominal injury and the small intestine is the usual site. Laparotomy should not be considered complete until the bladder has been inspected on the operating table. Inflation of the bladder with air may help. Even wounds of the buttocks and upper thighs must be regarded with suspicion until the course the missile has taken can be definitely determined. It is not unusual to find pelvic viscera injured as a complication of these injuries and the pelvic lesions are easily overlooked. The contents of the bladder should be examined. This may show hematuria, feces or foreign body. Vesicle symptoms and peritonitis may be associated. If abdominal symptoms are most important, laparotomy with exploration and repair of injuries discovered should be rapidly carried out.

Extra-peritoneal wounds of the bladder produce hematuria, difficult urination and urinary extravasation. These cases must be thoroughly investigated. Fraser and Drummond have called attention to the fact that urinary extravasation may follow three routes, viz:

1. It may pass through the great sciatic notch to the buttock.
2. It may pass through the obturator foramen to the thigh.
3. It may pass through the inguinal canal to the scrotum.

Regarding the treatment of these cases in the advanced surgical units—it is agreed that where no intraperitoneal lesions exist and adequate drainage of urine occurs a "let alone" policy seems to be preferable. If the danger of extravasation threatens the wound should be enlarged to provide adequate drainage. Debridement of the wound is always in order. At the General Hospital in the Base Area facilities are better and more extensive surgical treatment can be instituted. In one series of 15 cases of rectovesical fistula which followed penetrating war wounds (Legnen) 12 were healed by simple suprapubic drainage.

Wounds of the bladder should be recognized early. The mortality of this type of lesion is high unless properly cared for.

The external genitalia came in for their share of wounds of the genito-urinary tract. These injuries also are frequently associated with fractures of bones, injury to the rectum and occasionally intra-peritoneal wounds. Laceration of the urethra from shell fragments, rupture of the urethra associated with fracture of the pelvis are frequently seen. The usual symptoms follow: retention of extravasation of urine and hemorrhage. Catheterization is hazardous if not impossible and the danger of infection therefrom is great. The suprapubic cystostomy is a safe procedure in most cases when in doubt and leaves the primary lesion undisturbed and in better shape for reconstruction later. When the urethra has been completely severed the treatment of choice would be immediate surgical approximation. When this is impossible, and it usually is, a catheter inserted through a perineal urethrostomy and on into the bladder may suffice and lead to healing without stricture.

Whatever is the primary operation in the theater of war the effort should be to institute surgery of a type which will have a tendency to avoid extensive cicatricial contractures which will in turn require extensive plastic operations later. In these wounds also debridement early is important. If a retention catheter can be introduced and over it the severed ends of the urethra approximated, this is excellent treatment. Some strictures result in these cases but these can be dilated later. The mortality in these cases depends upon the development of complications. There are two to be feared: urinary extravasation and infection.

When the penile urethra is injured the primary danger again is hemorrhage and the surgical problem is to stop the hemorrhage and institute such repair as will preserve the continuity of the urethra and prevent as much as possible the formation of fibrous tissue infiltration. The corpora cavernosa suffer severely in this type of wound and the healing which follows frequently may result in gross distortion of the organ requiring extensive plastic repair.

Wounds of the scrotum and testicles are more frequent than wounds of any other part of the genito-urinary tract. They are of different types and degrees. The entire outfit or a part of it may be shot away—penetrating wounds, contusions, rupture of one or both testicles, foreign bodies lodged in the scrotum or testicle are among the more common findings.

The paralysis of the bladder with retention of urine following spinal injury offers quite a problem. About 80 per cent of cases with spinal cord lesions die of urinary infection (Walker). It is not always necessary to catheterize these cases nor to perform cystostomy. Horax states that he often found it possible to empty a paralytic bladder almost completely by massage of the abdominal wall. The newer drugs, the parasympathetic stimulants, may prove helpful in the future in these cases. In any event every effort should be made to avoid measures which may eventuate in infection. Where decompression is absolutely necessary, suprapubic drainage is better and safer than catheterization.

The continuously advancing specialty of urology finds an important place in the modern war machine. The services of the urological surgeon are as indispensable to the man in unform as they are to those at home. Our good Uncle Samuel is aware of this I feel certain.

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Radiation Castration as an Auxiliary Treatment to Mammary Cancer

Report of a Case of Recastration

S. W. DONALDSON, M.D. AND IRVING SILVERMAN, M.D.

THE knowledge that an ovarian secretion plays an important part in the growth and development of the mammary gland has been known for many years. From study of the ovarian function, additional evidence has been collected to show that mammary activity is dependent upon hormones of the ovaries and the anterior lobe of the pituitary body. The ovarian hormone causes the development of the breasts at puberty and also causes the rhythmic cycle of menstruation with its accompanying normal physiologic changes in the breasts.

Experiments conducted upon cancer-bearing strains of mice have also brought forth evidence that artifiical castration in young females delays or prevents the appearance of cancer in these mice and the administration of estrogenic substances apparently increases the time of appearance of cancer in the mice so treated.

Following the work done with mice and rats, additional experiments were conducted using castrated monkeys, and in 1927 Allen[1] successfully induced true menstrual cycles in castrated monkeys. Six years later, Werner and Collier[2] were able to produce experimental menstruation in ovariectomized women with the usual accompanying breast changes by injection of theelin. In his work with monkeys, Allen[1] was also able to show that the mammary gland reacts to estrogen alone by growth of both ducts and alveoli. In 1932, Lacassagne[3] published his successful experiments showing the occurrence of mammary cancer in male mice feminized by the injection of estrogenic hormones.

The hypothesis that the normal growth-promoting stimulant of the ovarian secretion affected the unrestricted growth of breast cancer as well as the development and activity of the breasts had its first clinical application in 1889 when Schinzinger[4] suggested bilateral oophorectomy as a method of treatment of breast carcinoma. Beatson[5] in 1896 reported three cases of mammary cancer in which therapeutic extirpation of the ovaries had been performed. In 1902, Thomson[6] reported 88 such cases with improvement in 22.5 per cent, and in 1905, Lett[7] reported improvement following surgical castration in 36 per cent of his cases.

Many years after Schizinger's[4] clinical application of castration as a method of arresting the growth of mammary cancer, a study was made of the sexual cycle in a cancer strain of mice. In this study, Allen[1] recorded the estrous cycles as soon as the breast tumors became palpable, and noted that as the tumor grew rapidly the estrous cycles lengthened and became irregular, in some cases disappearing entirely. Microscopic sections showed the vagina and uterus to be atrophic, similar to those in castrate animals, and the ovaries to be very small, as in old mice. Injection of estrogens in these mice induced full estrous growth in both vagina and uterus, but did not seem to affect the growth of the cancerous nodules.

The Authors

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ROENTGEN RAY CASTRATION

With the advent of the roentgen ray and an increased knowledge of the endocrine functions, castration by irradiation was introduced by a number of radiologists in cooperation with surgeons, in cases of inoperable carcinoma of the breast. Roentgen ray castration was first tried by Foveau de Courmelles[8] in 1904 and the report on cases treated in this manner was made in 1909. This method of therapy has been used routinely by Wintz[9] since 1920 and has been used by Ahlbom[10] as an auxiliary treatment since 1922. The latter author reported improvement in 73 per cent of such patients, over 45 years of age, as compared with the results obtained in control groups. Kaplan,[11] Hoffman,[12] Daland,[13] and Martin[14] have reported treating

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Submitted December 11, 1940.

cases in which they have noted marked changes in metastatic lesions.

Herrell,[15] in studying a series of 1096 consecutive records of women who had received a diagnosis of, or had been operated upon for, malignancy of the breast and a control group of 1011 women over 40 years of age who had not received a diagnosis of carcinoma of the breast, reports that in the cancer-bearing group the incidence of complete oophorectomy or castration before carcinoma was diagnosed was 1.5 per cent. In the control group, the incidence of complete oophorectomy or castration was 15.4 per cent, or ten times as great. In his conclusions on this statistical study, the author states that he is of the opinion that such findings as noted in his reported series of cases are an excellent indication that the ovarian role may be a very definite one in the production of mammary cancer in women, as it is in animals whose genetic factors can be controlled more or less at will.

RELATIONSHIP BETWEEN OVARIAN FUNCTION AND BREAST CANCER

Olch,[16] by combining the figures of several writers, has found that 71.7 per cent of all women pass through the menopause between the ages of 40 and 50 in a temperate climate and that 12 per cent will pass through menopause after the age of 50. In collecting a series of cases who came under observation for cancer of the breast, this same author found that 54.7 per cent were still menstruating or had passed the menopause after the age of 50 years, or almost five times as many as in this group had a delayed menopause as compared to a series of normal women. This finding he regards as significant, drawing the conclusion that delayed or prolonged menstruation must be a factor to be considered in the etiology of mammary cancer in older women. This same writer feels that since the experimental evidence of the relationship between ovarian function and breast cancer is so conclusive and abundant, and since more than one-half of the women over 50 with cancer of the breast are still menstruating or have had a delayed menopause, he suggests that artificial menopause should be proposed to those women menstruating between the ages of 48 and 50, whether or not they have palpable breast changes.

Taylor[17] in a recent article has stated that post-operative recurrence seems to take place more promptly in younger women and that carcinoma of the breast tended to metastasize earlier in young women than in older women and that it also tended to be of a higher grade of malignancy.

Nathanson[18] and Welch in their life-expectancy study offered curves to show the poorer prognosis in young women contrasted with older women.

Inflammatory carcinoma of the breast has habitually been considered as more prevalent in younger women and associated with pregnancy and lactation, but Taylor and Meltzer,[19] in their study, showed this condition to conform to the normal age group in their series.

Carcinoma of the breast coincident with pregnancy, or pregnancy occurring subsequent to an apparent cure has been considered of grave import. Portmann[20] has pointed out that prevention of pregnancy in such cases is to be attempted, and Trout,[21] studying the effect of pregnancy in post-operative cases, obtained records of 15 patients who developed carcinoma in the opposite breast. Of the 15, 12 of them terminated fatally more rapidly than is seen in the usual case without the complication of pregnancy.

Witherspoon[24] offers the opinion that to some, the induction of the menopause, especially in young women, in the treatment of carcinoma of the breast may seem somewhat radical, but in view of the tremendous growth-promoting properties of the estrogenic principle on secondary sex tissue, such treatment is very rational.

In cases where there are widespread bone metastases, it is not feasible to irradiate each lesion. For that reason, the rationale of irradiation castration for its effect on the secondary growth of the malignancy is a very useful procedure. Many cancer clinics have established routine castration for all breast tumor cases which have not passed the menopause, while others routinely use this method of treatment as an adjunct to the treatment of recurrent and inoperable cases.

Dresser[22] has shown a definite regression of bone metastases in 30 per cent of these cases treated by ovarian irradiation. The regression is manifest by destructive areas in the bone becoming hyperplastic, and in some instances by a return of normal appearance to the bone. In his series of cases, there was concomitant relief from pain even in those cases not showing regression of the bone lesions. He also states that in those cases which had passed the menopause not a single case showed any change in the metastatic areas in the bone. This latter observation does not coincide with that of Taylor,[23] who suggests that beneficial results may be obtained by ovarian irradiation in those women who have passed the menopause.

Taylor[23] has brought out the fact that there is a small sub-group of young women suffering from carcinoma of the breast in whom artificial menopause has shown striking benefit and that in these cases it is suggested that the ovarian hormone is essential for the growth of the carcinoma. He has also observed that greatest benefit is derived in those cases showing skeletal metastases and that after improvement the decline is more rapid than is the decline in patients not castrated. This is evidently due to the fact that there is a regression of the growth after removal of the stimulating factor of the ovarian hormone and then the neoplasm, becoming accustomed to this lack of stimulation, grows more rapidly than before. Apparently then, it must be assumed that the growth of the tumor is not dependent upon estrin stimulation after the growth has been established, although the evidence does point to the fact that growth is affected by the estrin stimulation, as there is a regression when a low level of estrin is obtained, and that removal of estrin does affect calcium metabolism as shown by the changes noted in bone where the lesion changes from an osteolytic lesion to an osteoblastic lesion when the ovarian hormone is removed.

Some writers have stated that in some cases, after irradiation artificial menopause had been obtained, menstruation was subsequently renewed. Evidently this was due to the fact that the patient received a sub-castration dose as is sometimes administered in the menopausal disturbances in younger women.

With the thought in mind that a certain percentage of inoperable or recurrent cases of carcimona of the breast would show improvement and possibly a longer life in greater comfort, we have endeavored to offer irradiation castration as an adjunct to other treatment to those patients where such a procedure was indicated. Our results have been the same as those of other observers in that some cases responded, others did not, and that in those where response was noted, there was a rapid decline after a period of time.

CASE REPORT

One case in particular, we feel, is worthy of a report. This woman, an unmarried, 49-year-old social worker, was first seen with an ulcerating carcinoma of the breast. At that time she was menstruating normally and regularly. She had first noticed the growth more than a year previously and had also noted that its recent growth had been more rapid, but that ulceration had only been present for about a month. The patient was considered inoperable by Dr. F. A. Coller, and was referred for radiographic examination to determine whether or not metastases were present, and for radiation therapy. The radiographs disclosed several areas of bone destruction in the pelvis and upper end of the femur on both sides and the spine, but no secondaries in either lung. The breast and axilla on the affected side was given intensive radiation, 200 PKV, one-half copper filtration. In addition, she was given 800 r pelvic dose through four portals to the pelvis. There was a complete disappearance of the axillary nodes and complete healing of the ulceration of the skin over the breast and disappearance of the tumor mass. Subsequent films of the pelvis and spine showed bone regeneration in all of the areas noted on former films before castration and in addition there was dense bone deposit in areas which showed very slight change in bony texture on the original films but could be detected when re-examined and compared with the films showing dense bone deposits.

The patient gained more than 40 pounds in weight and had resumed her work for a year when she returned with a rapidly growing carcinoma of the opposite breast and in which ulceration had occurred. She stated that she had not menstruated since her ovaries had been irradiated. Re-examination of the pelvis and spine showed extensive new areas of bone destruction in addition to the denser areas of bone deposit occurring in previously demonstrable metastatic areas following castration..

Knowing that ovarian function had been restored in patients with a sub-castration dose and that some writers had reported cases who had received pelvic irradiation as an auxiliary treatment to breast cancer and had the menses begin after a period of time, we were confronted with the following question: Knowing that severe skin reactions recover from intensive radiation; that lymphoid hyperplasia occurs following therapy by X-ray, and that secreting glands resume their activity following cessation of activity caused by irradiation, then why could not ovarian tissue also recover? It was thought plausible that, in spite of the previous dosage, the ovaries could resume some degree of function, possibly not enough to restore the menstrual cycle, but enough to give off estrin in an amount sufficient to stimulate a neoplastic growth. With this thought in mind, a second series of treatments were given directed to the ovaries and after sufficient length of time had elapsed, although the patient was declining, radiographs were made of the pelvis and spine in order to determine whether or not a change had occurred in the newer metastasic areas. No demonstrable changes were noted. From this we conclude that ovarian function had been entirely destroyed with the first dosage and that by the second castration we were unable to inhibit further secretion of estrin and that the presence of estrin had not contributed to the rapid and widespread metastases noted after new bone had been deposited in the older metastatic areas. The patient declined rapidly and died of pulmonary involvement.

CONCLUSIONS

1. A brief review of the history of castration as an auxiliary treatment to breast cancer and also a brief review of the literature is given.

2. Experimental evidence with animals and clinical evidence secured from published series of cases establishes the fact that mammary cancer is influenced by ovarian hormones, both in growth and spread.

3. Improvement is observed in a certain percentage of cases, especially with skeletal metastases, when castration is effected and that after a period of improvement and comfort there is a more rapid decline than in those cases not so treated.

4. Sufficient dosage should be administered to

entirely destroy ovarian function, and that if this is done recastration has no effect on the growth.

5. Delayed menopause must be considered as a factor in the incidence of breast cancer in women between the ages of 45-51.

6. Enough data has been accumulated to indicate that it is the proper procedure to propose castration as an adjunct to any method of treatment in all women so afflicted, and to those 50 years old or past who have not ceased menstruating.

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A Pediatric Program for the Family Physician

At one year the baby is now put on three meals a day and is given more solid foods. The mother is advised to bring the child back every three months in the second year and every six months thereafter. Attention is now directed to posture and the feet. Fatigue posture may be easily prevented at this early age with posture exercises and training in sitting and standing. Weak or undeveloped arches may be improved with appropriate exercises and properly fitted shoes.

Evaporated milk is the choice of most pediatrists because it is a clean, sterile, and universally available food. Evaporated milk forms fine curds and is hypoallergic. I doubt that soft curd and homogenization may have any practical value but evaporated milk has these features and is the least expensive, most easily preserved milk available. If cow's milk is used it should be boiled five minutes. This makes it sterile, soft curd, homogenized, and less allergic.

There is a tendency in recent years coincident with a strenuous advertising campaign to add cereals and vegetables to the infants' diet at a much earlier age than I have designated. This tendency is to be deplored and condemned. It is true the helpless infant has been subjected to innumerable experiments in feeding and many wild ideas in formulae, but his tolerance should not be deliberately tested. The average healthy infant will thrive on considerable abuse, but his digestive tract is the first part of his organism to react when he is sick. Vomiting and diarrhea are the usual first reactions to illness. The object of all feeding is to provide a substitute for breast milk and to add foods only as necessary to maintain adequate growth and development. The vitamins, iron, and calcium must be provided to maintain an adequate reserve. These factors are usually well supplied in an adequate diet. It is often necessary to provide additional iron.

The early introduction of cereals and vegetables may sensitize a child before his intestinal tract is ready to absorb the new proteins. The rapid increase in intestinal allergy and eczema is probably due partly to this factor. There is also an increased incidence of chronic intestinal indigestion, which I believe is due to intestinal insults to a digestive tract designed and intended only to handle breast milk.—M. G. Peterman, M.D., Milwaukee; Rocky Mountain Med. Jour., Vol. 38, No. 2, February, 1941.

If a doctor's life may not be a divine vocation, then no life is a vocation, and nothing is divine. —Stephen Paget.

What is Your Type of Cold?

THOMAS M. STEWART, M.D., F.A.C.S.

A NEW treatment for colds makes its appearance every now and then. If the new treatment happens to be curative in a certain number of cases, the trial and error method has a new spurt. But no one treatment is adapted to every variety of cold and some good thing for some variety of cold is soon in the discard.

There are many different varieties of cold and the treatment for one variety, however good it may be, is not the best treatment for some other type of cold. The lack of immunity or protection against subsequent colds is the unique character of colds. Other infectious diseases do confer immunity in a large percentage of cases.

Prior to the discovery of bacteriology the causes of cold were considered to be chilling drafts, wet feet and damp clothing. The germ theory carried many workers far afield and the medical profession accepted a bacterial origin for most diseases including colds. That supposition outran the facts.

Dochez then gave us the theory of a filterable virus and presented data on careful and extensive experimental grounds. It is true that in the laboratory one may grow in tissue culture, an agent which produces symptoms like a common cold, but that such agent is the universal primary cause of the common cold is doubted. Therefore, because it is now common knowledge that no one method is available to prevent and to treat the common cold, it would seem wise to start from a different angle and make a comparative study of colds on the basis of their differences. Such a study will disclose not one kind of a cold but many different types.

HEAD COLDS

Head colds, coryza or rhinitis involves the sinuses. Such colds are due to drafts that reduce the body heat and keep it too low for too long a time.

Too much ventilation at night makes one breathe air too cold for too long a time. Patients with a slow pulse, low blood pressure and subnormal temperature, are the type that most easily contract these head colds.

Treatment is to regulate ventilation. The injection of three units of plain insulin for a few days, together with such other remedial measures as the physician from experience has found the most helpful. Dr. D. C. Jarvis of Barre, Vermont, first suggested small doses of insulin in this and other ailments. Aspirin, acetyl-salicylic acid, should be prescribed by its technical name when prescribed at all. It is a heart depressant and is better replaced with a cold-fever tablet triturate. There is a place for the use of auto-filtrates of the secretions in cases that resist other well directed treatment. The dose must be small in potency as well as quantity to begin with, as will be disclosed later.

The Author

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DUST COLDS

Lamb's wool or small pledgets of sponge in the nostrils will filter dust or moisture laden air and will prevent this type of cold when handling dusty books, papers, or clothing.

COLDS DUE TO THE LOSS OF MINERAL SALTS

Such types of colds are more frequent in summer, because free perspiration causes a loss of mineral salts from the body, thus upsetting its chemical balance. The salts are deposited in the skin because there is not enough water in the system to keep them in solution and the excess water is lost through the nose as well as through the skin. The treatment is first to remineralize with sodium and potassium principally. Prescribe a tablet containing mineral salts, particularly sodium and potassium.

"SWEETS" AND COLDS

A watery discharge from the nose and overmuch mucus in the throat can be caused by too frequent or too much sweets, even infrequently. Desserts, soft drinks, pies, raw milk, cake, honey, syrup, sundaes, candy and ice cream are the chief offenders. Regulate these. Occasionally treatment for the so-called candy sprees is at times needed. HCl by intravenous injection of 1 to 1000 solution in small dose is the remedy.

OBESITY COLDS

Such types of colds occur in patients trying to reduce by eating green vegetables and fruits. They get too little protein and that means too

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Submitted November 1, 1941.

much iodine and potassium with too little sodium and chlorine. The treatment is a better balanced diet with plain insulin, three units every day for a while.

FRUIT JUICE AND COLDS

This might be called the wet nose cold, but with little or no obstruction to breathing. It is common to those who daily drink freely of the juice of orange, grape fruit, tomato, grapes and pineapple.

Here again Dr. Jarvis suggests small doses of plain insulin and the daily dose of fruit juice stopped. Fruits with their pulp better sustain their alkaline base reactions and prevent acidity.

OVER-EATING AND COLDS

Holiday feasts, banquets and over-eating at any time, all cause a type of cold every one knows about. A laxative and an enema are of the first importance. Follow with a light diet for a few days. Insulin to help carbohydrate (starch) metabolism and this will speed up recovery.

ALLERGIC COLDS

Many allergic disorders of which the allergic type of cold is one, are due to inadequate detoxication of histamine formed in the alimentary tract (food allergy), or the release of an over-amount of histamine into the circulation, gives rise to general symptoms. If histamine is released locally into the skin it gives rise to acne, urticaria and itching eruptions.

If the release is in the bronchi then bronchial asthma is the result. If the upper respiratory tract is the site of histamine release, hay fever, spring catarrh or rose cold supervene. Hirmant, Evans and Halpin advise a blood eosinophile count, and Cowie and Jiminez state that a blood eosinophile smear of 20 to 25 per cent indicates allergy, other factors may cause a high eosinophile count.

The modern treatment is to desensitize the patient to histamine which cannot be done completely by pollens, vaccines or serums. The process is that of desensitizing the system and not one of immunization, the dosage in the latter process is entirely too strong in potency as well as in quality.

Other allergic conditions are hay-fever, asthma, bronchial colds and various skin conditions, all of which are altered internal chemical conditions with cellular suboxidation. Treatment is basically a desensitization of the system to its abnormal hypersensitive condition. The usual pollens, vaccines and serums can be replaced by the desensitizing methods of Dezenick and Hardgrove's small doses of typhoid vaccine.

The method of Dezenick is the use of histamine in very dilute strength gradually increasing up to between ten and twenty treatments, according to the severity of the case and its response. The first dose is 0.00001 mg., the second 0.00002 mg. and so on. By the time the tenth dose is reached your patient's reactions will have taught you the rate of dose increase before your patient can take the regulation strength of histamine at present furnished, which is 0.001 mg. to the c.c. This is quite different from the giving of a small quantity of the 0.001 mg. at a time and gradually increasing the quantity. Quantity is not the same as potency in a therapeutic sense. Neither is Dezenick's method the same as supplying histaminase, a natural substance also present in the body, to neutralize the histamine formed in the body from the digestion of protein foods.

The problem is to desensitize the body to its own histamine formation and thus reach the cause of many allergic conditions. To maintain this desirable state the diet will need regulating.

1. Use rye flour and corn meal. Not wheat foods.
2. In place of sugar use honey or small amounts of saccharine in place even of brown sugar.
3. Fish, sea-food, liver, tongue, heart or kidney, to avoid the muscle meats as in chops, steaks and roasts.
4. Adults should not use milk as a beverage; use it as a food; cut out soft drinks and sundaes.
5. No fruit juices, eat fruit, but not the same kind of fruit daily.
6. Dilute HCl 1:1000 intravenously as an oxidizing agent twice weekly.
7. One tablespoonful of purified corn oil at each meal for its fuel value in the foregoing diet.
8. Iodine, aqueous not alcoholic, three drop doses in one-third glass water at meals, because according to Jarvis the trial and error method has established it as one of the few catalysts or activators in overcoming oxygen metabolism block.

STARCH DIET AND COLDS

Some people are overly fond of starchy foods. When such a one passes his starch tolerance power, he is troubled with jelly-like lumpy secretions from the nose, throat and bronchial tubes. This is the hawking and coughing and spitting type of cold.

The main causes are too much or too frequent use of wheat in flour or cereals including buckwheat. Other high starches are: rice, macaroni, spaghetti, corn, least bad of all is potatoes.

Variety in diet is the keynote of eating for health.

Hydrochloric acid is useful internally as well as intravenously. Insulin is also useful.

THE FLU COLD

Note this, depression, fever, rapid pulse, headache, dizziness, pains in sinuses, and aches in the body are among the symptoms that make a patient feel sick, because he is sick.

The first remedy is to send that patient home or keep him at home and in bed. Insulin, three units daily until recovery as a carbohydrate oxidizer. Aqueous iodine, three drops, well diluted between meals and on retiring.

Here is a good place to state that cellular activity of the body in health as well as in any and all ailments is important, because the oxidizing enzymes of the cells must be maintained and renewed.

The oxidizing minerals are iodine, iron, copper and manganese, arsenic, sodium chloride and pottasium are in this group as well as thyroid extract, dilute HCl, and insulin.

These are well known remedies and a re-study of their action will repay the one who does it.

DRUGS AND COLDS

Often caused by the hit and miss use of aspirin, nothing more or less than a patented name for the old acetate of salicylic acid. Aspirin has many other names such as xaxa, acid aceticosalicylas, acetosalic acid, acetophen, salacetin, etc. Bromides, which in various trade name preparations are also the mischievous little imps that help to make business for doctors in spite of their efforts to impart the truth to patients, many of whom assume to know more than their trusted friend.

Inhalants like spirits of ammonia and benzedrine if too often used act as irritants and may aggravate instead of soothe.

Soft drinks containing phosphoric acid and caffeine please by their snappy taste but if used daily help the doctor more than they help those who over-indulge.

As the lawyers say, this is a brief on behalf of colds. One's own experience on this basis will be the best elaboration of this thesis.

717 Union Central Bldg.

Prevention of Hypertension

While it is true that we do not know the cause of essential hypertension, we do know enough about the nature of this process to plan a more rational management. Evidence is increasing concerning the deep-seated constitutional nature of this disorder, and superficial efforts to lower blood pressure and one-sided approaches to the problems must be condemned.

What are the stressful or vasospastic agents, the effects of which we must try to minimize? First of all, there is the question of obesity, because the build and weight of the individual have been shown to be of real importance in the etiology of hypertension. I cannot discuss all of the dietary fads that have prevailed in regard to the treatment of essential hypertension. The question can be dismissed by saying that in spite of the dread of protein, and red meat in particular, there is no evidence to prove that protein bears any relation to the cause of essential hypertension and the same is true of salt, that is, sodium chloride. It is the total diet which is important and then only in relation to obesity.

A second and even more important consideration is the question of the toxemia of pregnancy. Recently it has been shown that almost one-half of all women who have toxemia of pregnancy develop hypertensive-vascular disease or chronic nephritis within a period of five years. This seems to be true of the milder degrees of toxemia as well as the more severe forms. The clinical deduction is obvious; if we are to prevent hypertensive-vascular disease and kidney disease we must make less effort to nurse these women through their toxemias and must make more effort to interrupt their pregnancies or induce labor. Ophthalmoscopic study is going to prove of inestimable value here, and the obstetrician will have to learn its value and use just as he has that of the blood pressure determination.—Edward Weiss, M.D., Philadelphia; Med. Annals of District of Columbia, Vol. IX, No. 12, December, 1940.

Treatment of Ocular Phobias

The treatment of ocular phobias must counteract some old adages which are as prevalent as measles: "Don't read too much, you'll ruin your eyes." "You mustn't read in such poor light, you'll injure your eyes." "You must have your glasses changed every two years." The treatment must also counteract a recent commercial advertising campaign which is attempting, unfortunately, to sell light by instilling fear in the customers' minds, rather than on the basis of their comfort. To the physician attempting to keep his patients comfortable, that seems a regrettable situation.

Working in poor light simply means that a weak stimulus is given to the rods and cones of the retina, travels along the optic nerves, and reaches our consciousness. There can be no more injury to the retina or optic nerve produced by a weak light stimulus than there is caused to the ear or hearing nerve by listening to soft organ music. If dim light could possibly cause any harm, we certainly would never dare go to sleep and shut out the light.

If these people with their phobias are started off on the wrong foot by encouragement to worry about themselves either by malicious or thoughtless remarks of what they must and must not do, they will soon become unhappy eye neurotic individuals; if, on the other hand, some of these simple facts are explained, their future life can be made very comfortable at least as far as their eyes are concerned.—Abbott M. Dean, M.D., Council Bluffs; Jour. Iowa S.M.S., Vol. XXXI, No. 2, February, 1941.

Hematomyelia

WILLIAM RAVINE, M.D.

THE term "hematomyelia" was first introduced by Ollivier d'Angers in 1827. Oppenheim in his textbook of Neurology, speaks of it as spinal apoplexy or apoplexia medullae spinalis. Hemorrhage into the cord is decidedly less frequent than cerebral hemorrhage. Its less frequent occurrence is believed to be due to the fact that the spinal arteries are long, narrow and tortuous, being subjected to less severe pressure than the cerebral vessels.

The usual conception of hematomyelia is that of a large intra-medullary spinal hemorrhage with a tendency to spread longitudinally over several segments. It has been further designated as "tubular" and as "annular" hematomyelia. The hemorrhage shows a marked predilection for the grey matter, a fact that seems adequately explained by the looser texture and greater vascularity of the grey substance as compared with the white. The posterior horns are invaded more often than the anterior horns. Experimental proof of a tendency to spread in grey matter mechanically has been provided by the experiments of Goldscheider and Flatau (1897) and of Lepine (1900), in which fluids were injected under pressure into spinal cords.

The causes of hematomyelia are multiple. Most authors state that trauma is much the commonest of these. A second large group is that termed "spontaneous hematomyelia", which includes these cases of primary hemorrhage without trauma. Hematomyelia has been described as occurring secondarily in syringomyelia, intramedullary spinal tumours, syphilitic myelitis, hemorrhagic diatheses, arteriosclerosis, miliary aneurysm of the spinal arteries (Hebold, 1885) and in acute myelitis. Smaller hemorrhages of no clinical significance may occur in some of the above conditions, in acute anterior poliomyelitis, and in general acute infections and intoxications. The classification followed by Gowers (1886), and by Doerr (1906-7) in his comprehensive review is: (1) Traumatic; (2) Spontaneous; (3) Secondary (tumour, syringomyelia, etc.); (4) Accessory (small hemorrhage not giving rise to any clinical symptoms). This last group should probably not be included under the term "hematomyelia" with its customary, though arbitrary, meaning of a large central hemorrhage.

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Arteriosclerosis and hypertension, which are of such prime importance in cerebral hemorrhage, have been shown to play little or no part in the etiology of hematomyelia. The age incidence of the latter is earlier than that of cerebral hemorrhage, being commonest in the twenties. Men are much more commonly affected than women.

In Doerr's review of 30 cases with autopsies, there were 20 men and 10 women.

Age in years	0-10	11-20	21-30	31-40	41-50	51-60	61-70
No. of Cases	1	6	11	5	1	2	4

This report is concerned with a "spontaneous" type of hematomyelia and one due to direct trauma.

An illustrative case of spontaneous hematomyelia is presented by Richardson:

Case 1.—Hematomyelia caused by an angioma. A young man, aged 25, who was a patient in the National Hospital, under the care of Dr. Hinds Howell, from November 19, 1936, until his death on December 13, 1936.

Clinical History.—He was well until October 1, seven weeks before coming to hospital. At that time he noticed a gradual onset of numbness in the toes and in the ball of his right foot. There was a tingling sensation whenever he put his foot to the ground. During the first week the numbness gradually spread upwards to involve the whole foot; then in another fortnight the back of the right leg and the inner surface of that knee also felt numb. One week after the onset of symptoms he began to have a constant dull ache across his back in the lumbar region, which was aggravated particularly by bending his head forwards. In the fourth week he began to have an intermittent slight weakness of his right leg. On October 31 he found while playing football that he could not run or kick as well as usual. The next day his legs and back were stiff and painful. On November 2 the pain in his back and legs increased and kept him awake all that night. In the afternoon he vomited several times and there was a rapidly progressive weakness of his legs so that by evening he could not stand. On November 4 the legs were completely powerless and anesthetic. The pain had then disappeared from his legs but remained severe in his back. He had complete retention of urine and

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Read before the Section on Nervous and Mental Diseases, Ohio State Medical Association, at the Ninety-Fourth Annual Meeting, Cincinnati, May 14-16, 1940.

faeces. From that time, that is for two weeks before coming to hospital, he remained in the same condition.

His past health had been good. Two weeks before the onset of his illness he had an infected scratch on his left forearm, which discharged pus in small amounts for several weeks. He also developed a large pustule on the left index finger three weeks before admission.

Clinical examination.—He was a tall muscular young man, whose legs were paralyzed, and who was obviously in great pain. The cranial nerves were normal except for a fine nystagmus on full lateral deviation of the eyes. He was unable to sit up, and on trying to do so there was a deviation of the umbilicus upward and to the left. The legs were flaccid and completely powerless. The tendon reflexes were normal in the arms, absent in the legs. There was no response to plantar stimulation. The right upper abdominal reflex was feeble, the right lower absent; those on the left were both normal. All forms of sensation were absent below the twelfth thoracic segmental level on the right and the first lumbar level on the left. A higher band of moderately impaired sensation to pin-prick and heat and cold was present between the fifth and ninth thoracic levels on the right, with a band of hyperalgesia between it and the region of complete loss. There was a fairly pronounced tenderness over the lower lumbar vertebral spines. Both knee joints were swollen and contained fluid.

The temperature at first was normal except for occasional rises to as high as 100° F. There was no leucocytosis or anemoa (R.B.C. 5,200,000 per cu. mm.; Hb. 95 per cent; W.B.C., 7,600 per c.mm.). The urine contained many pus cells. The cerebrospinal fluid was clear, colorless and under normal pressure, with no signs of block on jugular compression. Cells were not increased in number. Total protein was raised to 0.09 per cent, and the Pandy test was weakly positive. The Lange gold curve was 0000110000. The Wassermann reaction was negative in the cerebrospinal fluid and blood.

Summary.—A young man who had gradual onset of numbness and later weakness of his right leg for four weeks, then sudden severe pain in the legs and back, followed by complete paralysis of legs, bladder and bowel. Examination suggested a complete transverse lesion of the cord at about the first lumbar segment, with a higher intramedullary lesion from fifth to ninth thoracic segmental levels.

A provisional clinical diagnosis of acute myelitis was made, but as he had at the time of onset of his symptoms a purulent infected wound of his left forearm, and later developed a large pustule on the left index finger, the possibility of a staphylococcal abscess in the epidural space could not be ruled out. An exploratory laminectory was therefore performed, with a negative result. He became progressively worse owing to an intractable infection of the urinary tract. He developed high fever and a mild toxic jaundice before his death on December 13.

Postmortem examination.—Autopsy showed the cause of death to be an acute suppurative pyelonephritis with a gangrenous cystitis.

On the surface the spinal cord looked normal except for slight diffuse swelling in the lumbar enlargement. On sections the cord showed a rounded, tubular cavity containing blood-clot, running down from the lower part of the fourth dorsal segment to the lower end of the cord. Above, the cavity was small, and situated in the right posterior horn. Lower, at the junction of the ninth and tenth thoracic segments it became more median, lying at the apex of the posterior columns just behind the posterior commissure. In the twelfth thoracic segment the hemorrhage was much larger and passed across the midline in the grey commissure. It became largest, nearly 12 m. in diameter, at the lower border of the first lumbar segment, and below this ran down as a central cavity in the posterior columns to the lower end of the cord. The physical signs coincided accurately with this distribution of the hemorrhage. The band of sensory loss from fifth to ninth thoracic segmental levels was due to hemorrhage in the right posterior horn. From the ninth to the twelfth thoracic levels the hemorrhage had spread out of the grey matter, and in those dermatomes sensation was preserved. At the first lumbar segment the massive hemorrhage had caused a complete transverse lesion, below which motor power, sensation and reflex activity were lost.

Histological examination.—On the posterior part of the section through the area of largest hemorrhage one could faintly distinguish macroscopically, a small, oval, yellowish, porous-looking area of abnormal tissue. Microscopically, this was found to be a small angioma confined to that segment. It consisted of a localized collection of large and small thin-walled blood sinuses. In a few of these the structure resembled normal veins, but they mostly consisted of a thin layer of collagen, with a single lining layer of flattened epithelium. There were some localized hyaline thickenings of the walls. The tissue between these sinuses was composed of hyperplastic glial tissue infiltrated by hemorrhage, of scattered bands of connective tissue and some nerve fibres. An actual point of rupture of one of the larger sinuses could be seen in some of the sections.

The clinical symptoms suggest that a slow leakage occurred at first, then a more massive hemorrhage. This severe hemorrhage following a game of football was probably provoked by the spinal venous congestion ensuing upon the strenuous exertion. Trauma was in that sense a secondary precipitating factor.

The hemorrhage appeared recent, being composed of intact red blood-cells centrally, with a relatively small amount of blood pigment at the periphery. This pigment was greatest in amount in the first and second sacral segments. The white matter at the margin of the hemorrhage was severely degenerated and there was some proliferation of capillaries, and perivascular infiltration of lymphocytes. In the grey matter of both anterior and posterior horns there were pronounced degenerative changes in the nerve-cells, with well-defined neuronophagia and falling out of cells.

Vascular tumours and malformations of the spinal cord are rare, but in the cases reported hematomyelia is not an uncommon complication. Lissowsky (1933) reports a case in a 49-year-old man, very similar to the above described, in which there had been no symptoms prior to the terminal hematomyelia. The vascular lesion was very similar to ours, and was almost invisible macroscopically. Also in Buckley's case (1936) of a large cervical angioma there was little or no clinical manifestation until a hemorrhage in the grey matter extending to the lower thoracic region terminated fatally. In that angioma a more mature type of blood-vessel is described. Similar vascular lesions reported by Guillain, Schmite and Bertrand (1932) by Ohlmacher and by Bremmer and Rossolimo (quoted by Lissowsky) have very similar features and were complicated by hematomyelia. Russell (1932) reported a case of camillary hemangioma of the spinal cord with extensive cavitation, which may have been the relic of a hematomyelia. Such "angiomata" are probably developmental vascular malformations rather than true tumours. They tend to occur in either the cervical or lumbar enlargements.

Symptoms are usually sudden in onset the prodromal symptoms of spreading numbness and then weakness of a leg may precede the rapid onset of a complete paraplegia as in the above case of Richardson.

Etiology.—Trauma is the commonest cause of hematomyelia. A fall on the back; a forcible bending of the head forward; or the head being struck against an object like a bridge or sill. Cases have occurred after diving into a shallow pool of water. Oppenheim has encountered a case after heavy lifting—a man raised a trunk from the floor was immediately seized with pain in the legs and several hours later developed a complete flaccid paraplegia.

Many writers believe that some underlying cause other than the trauma must predispose, viz., a hemorrhagic diathesis, or lues.

Case Report No. 1, Hospital No. 18—2536.

White male, age 36, admitted to the Jewish Hospital May 3, 1935, complaining of paralysis of his left leg. Patient states that on April 28, 1935, at about 11:00 a.m. while working for the N.& W. R.R., he was engaged in work with a pick and shovel, leveling a road bed between the railroad tracks. His posture at the time that he experienced his first pain, was ventral flexion from the hips.

He first experienced pain in the back at the lumbar region with a numbness of the entire left leg, with an inability to stand on it. There was complete loss of sensation and function in the entire left leg and foot. There was no involvement of any other part of the body. He quit his work at noon or one hour after experiencing pain in the back and numbness in left leg. On the following day he was unable to move the left leg or stand on it. He remained at home in bed about five days with no improvement in the paralysis of his left leg.

No history of high blood pressure or a stroke. Past history good. Denies syphilis or gonorrhea. He suffered no direct injury to his back. He had a broken rib in 1913, induced by his boxing with a sparring partner. Never suffered any other fractures. Has had some minor injuries.

Examination on admission: Patient is a white male, 36 years old, lying in bed complaining of inability to move the entire left leg and foot.

Interne's impression: (1) Sacro-iliac strain; (2) Hysterical paralysis.

Neurological Examination—5-17-35: He is lying in bed, oriented as to time and place. Complaining of inability to move his left leg and foot. Left leg and thigh somewhat wasted as compared with the right and shows evidence of a flaccid paralysis. He is unable to actively move the left leg. Raising it and dropping it, it falls as a dead weight. Slight plantar flexion of left great toe. Inability to extend other toes. No sensory disturbance in left foot. Pain, touch, heat, cold and vibratory sense not impaired. Patellar and achilles reflex absent in the left leg. Cremasteric reflex present on both sides. Rectal and vesical sphincters not impaired. Pupils equal, respond to light and accommodations. Fundus—negative. Facial innervation equal on both sides. Tongue protruded in midline. No speech impairment. Upper extremities are actively and passively movable. Abdominal reflexes weak on left side, present on right side. Right patellar reflex present. No Babinski-right.

Summary: As compared with admission examination, there is some improvement noted.

Neurological Examination—5-25-35: Considerable improvement. He can rotate thigh outward and inward on the left side as well as bend and flex the toes on this side. All these movements are much weaker than on the right side. Peroneus muscle—left side very weak. Patellar and achilles reflex still absent on left side. Spinal fluid under pressure and xanthochromic. Wassermann—negative of the spinal fluid.

6-15-35—Further improvement. No sensory disturbance in left leg. Some paresis of the muscles of the hip, thigh and leg. The dorsal flexion of toes and foot improving.

7-1-35—Patient allowed up in chair.

7-8-35—Improving, up in chair.

7-16-35—Allowed up and around.

7-17-35—X-ray spine 12 D-vertebrae—looks like syphilitic bone lesion?

7-26-35—Neurological Examination: Patient lying in bed complaining of weakness in back. Big toe, left, looks spastic. Left thigh smaller than right. Brownish discoloration at the left ankle. Left leg actively and passively movable.

Reflexes	R.	L.
Babinski	—	+
Patellar	+	+
Tendo achilles	+	—+
Cremasteric	+	+

No ataxia or sensory disturbance left. Gait is not impaired—walks somewhat bent forward. Glutei—not wasted. Slight prominence last dorsal vertebra not tender to pressure.

Orthopedic consultation, 12 D. vertebrae—negative. Hemorrhage sometime before slight trauma. The symptoms are due to hematomyelia.

5-3-36—Returned for check up. He has been working for several weeks—slight complaint of pain in back. Back is not painful to pressure or slight percussion. No neurological findings. Both lower extremities equal in size and function.

Case No. 2—Hospital No. 240539.

A white male admitted to the Jewish Hospital May 27, 1939; discharged June 9, 1939.

Admission notes made by receiving physician May 27, 1939—11:00 p.m. While riding in an auto this evening he skidded and the machine landed in a ditch, after turning over three times.

Examination revealed vague cord findings with lack of motor power in left lower extremity, spastic musculature and hyperactive reflexes; combined with absence of left abdominal reflex and cremasteric on same side. He has a urethral discharge neisserian infection. X-ray in A.M. of spinal column—negative.

History of Accident: While driving his car he skidded—car turned over and he landed in a ditch. He states he could not get out of his car as both legs were paralyzed; had to be lifted out of his car and placed on a stretcher. Physician called to accident found both legs paralyzed and complete motor and sensory paralysis below waist line. His bladder was distended and he was unable to void.

Twelve hours after admission he began moving toes of right foot—later right leg. Left leg spastic. He had to be catheterized. Upper extremities—negative. No evidence of injury to head.

Reflexes	R.	L.
Abdominals	++	++
Cremasteric	++	++
Patellar	++	+
Chaddock	↓	↑
Plantar	↓	↑
Oppenheim	↓	↑

Motor power weakened in left leg. Spastic.

Sensory Examination: Hyperthesia in upper third of both thighs more marked in the left.

May 29, 1939—Patient can move left leg with some resistance. Can likewise flex left knee.

Neurological Examination: May 30, 1939—Pupils—left larger than right, left sluggish to light. Upper extremities actively and passively movable.

Reflexes	R.	L.
Abdominal	+	—
Cremasteric	—	—
Patellar	++	+
Babinski	↓	↓
Cremasteric	+	+

No sphincter disturbance.

Diagnosis: (1) Concussion spinal cord; (2) Hematomyelia.

Treatment: Rest in bed 10 to 14 days. Spinal puncture was not performed on account of a neisserian infection and the improvement of his clinical symptoms.

X-ray spine—negative.

Wassermann blood—negative.

Smear from urethra positive for gonorrhea. No spirocheta found in dark field.

June 9, 1939—Asked to be discharged from hospital as he had fully recovered the use of his limbs. He was able to walk out of the hospital.

SUMMARY

(1) Two cases of hematomyelia are reported; one occurring while the patient was at work on the railroad, handling a pick and shovel and in the position of bending his back forwards at the waist.

(2) The other followed an overturning of an automobile without his having sustained any injury to the spine or any other part of the body.

(3) The symptoms of cord involvement were gradual in onset.

(4) Both cases had negative X-ray findings of the spine.

(5) Trauma is the commonest cause of hematomyelia; although the first case has some semblance of a spontaneous onset.

(6) With the increased frequency of auto accidents and concussion to the spine and cord this condition must be borne in mind.

(7) Both these cases were looked upon as functional.

(8) Treatment in the uncomplicated case is rest in bed; with internal administration of alteratives to aid in the absorption of the hemorrhage and proper care of the paralysed extremity.

(9) Prognosis as to recovery depends on the seat of the hemorrhage, length of time of existence and its progression or recession.

(10) Differential diagnosis: It must be differentiated from myelitis, tumours of the cord; syringomyelia and blood dyscrasias.

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REFERENCES

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Pyloric Obstruction

Peptic ulcer is considered a medical disease. Surgery is resorted to only for the complications, which are:

Intractability to medical treatment, which may be treated by pyloroplasty or radical partial gastric resection. Gastrojejunostomy in this type of patient is followed by a high incidence of marginal or jejunal ulcers.

Pyloric obstruction, which occurs in elderly individuals as the result of a contracting scar of a healed ulcer. Excellent results are obtained by gastrojejunostomy.

Perforation, which should be treated by simple closure.

Hemorrhage, which may be treated medically with a mortality in the neighborhood of 5 per cent. In massive hemorrhage, surgery is a lifesaving procedure. However, it must be instituted early, usually within the first 24 to 48 hours. When the patient has been carried along at death's door for a number of days on medical treatment, surgery is seldom of any avail.—E. L. Eliason, M.D. and Julian Johnson, M.D., Philadelphia; Rocky Mountain Med. Jour., Vol. 38, No. 1, January, 1941.

Family life in contact with a case of tuberculosis greatly increases risk of the infection spreading, especially in the age group when health is of maximum economic and social importance.—Geo. H. Ramsay, M.D., et al, Health News, Oct. 21, 1940.

Observations On the Application of Vitamin D to the Skin

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WE are presenting the results of our current investigation to determine the therapeutic value of cutaneous application of Vitamin D in infants. The pediatrician is occasionally confronted with cases in which the need for Vitamin D is imperative, but in which its oral administration is prohibited by the very nature of the affection. Cases of pyloric stenosis, gastro-enteric infections, various forms of indigestion and allergic states, may be cited as examples. In such conditions, especially when they occur in immature or rachitic infants, a potent Vitamin D inunction should prove a valuable therapeutic adjunct.

In the northern climates and in European countries cod liver oil has been used as an application to the body for many years, although the true reason for its value and specific indications for its use were not known.

Price,[1] in 1926, found that rubbing cod liver oil on a limited portion of the chicken's body had an effect on the level of the blood calcium. Cutaneous applications of cholesterol also increased the blood calcium; to a greater degree if the cholesterol had been activated. Hume, Lucas and Smith,[2] in 1937, noted that an irradiated cholesterol could be absorbed from the undamaged skin of rabbits in amounts sufficient to protect against rickets. Lazarew,[3] in 1930, applied "Ergosterin" in chloroform solution to the depilitated skin of rats, covering the application with a jacket. He claimed that the roentgenograms showed healing of rickets in these animals. He next used an oily solution with similar results. Amrhein,[4] in 1934, encased the tails of rachitic rats in pyrex tubes, smearing them with cod liver oil concentrate in peanut oil. Improvement of the rickets was demonstrable in the roentgenograms. He also used with success a sun-irradiated cholesterol in a mineral oil base. Foder,[5] in 1934, applied irradiated ergosterol in olive oil on the shaven backs of rachitic rats and claimed that this procedure was effective in the cure of rickets, but found that ten times as much Vitamin D was required as when given per os. Astrowe and Morgan,[6] in 1935, found that viosterol was absorbed through the skin of rats in sufficient quantity to prevent and cure rickets. Mallinckrodt-Haupt,[7] in 1935, noted an antirachitic action in rabbits when irradiated cholesterol was applied to the skin. Helmers and Jansen[8] as a result of their studies on rats asserted that Vitamin D is absorbed through the skin with extreme rapidity, in some cases being detectable as early as 60 seconds after inunction.

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The studies cited above were conducted on animals. Lazarew[3] makes the statement that he treated several rachitic children percutaneously in approximately the same manner as in his animal experiments. However, he gives only one example, and apparently did not carry out the roentgenographic studies or the calcium and phosphorus determinations. He states only that the patient was cured of painful joints and craniotabes after three weeks of treatment. Garland,[9] in the wards of the Children's Medical Department of the Massachusetts General Hospital, observed 11 children who had not been treated for rickets and who showed inorganic blood phosphorus below the normal level. Most of the children had clinical evidence of rickets. Gauze pads saturated with one tablespoonful of cod liver oil were applied and held in place with flannel binders. This treatment was continued for from 15 to 35 days. All but one of the treated infants showed increase in blood phosphorus (inorganic) within a period of two weeks.

Our study of the absorption of Vitamin D through the skin was conducted on infants in the hospital in order to insure more adequate

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Read before the Section on Pediatrics, Ohio State Medical Assocation, at the Ninety-Fourth Annual Meeting, Cincinnati, May 14-16, 1940.

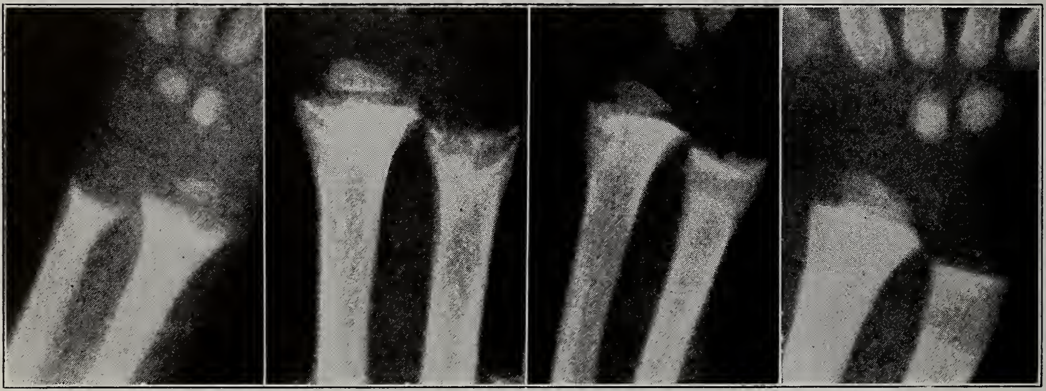
control. Infants presenting clinical and roentgenographic evidence of rickets in an active stage were chosen for this observation. Six of the patients were from the Premature Department of the Cincinnati General Hospital and two of them were from our private practice and observed in the Good Samaritan Hospital. They were treated in rooms or wards in which all daylight came through ordinary window glass; all artificial illumination was indirect from ordinary mazda bulbs. The infants were not taken out for airings during their stay in the hospital. The feedings consisted of a mixture of non-irradiated evaporated milk or a non-irradiated powdered milk with added Beta-Lactose. Vitamin A was administered as Carotene in oil (SMAco), 2500 u daily; Vitamin C as orange juice, one-half teaspoonful per day as a minimum dose.

All roentgenograms were taken in a standard manner by one of us (DJ), using only the distal ends of the radius and ulna for diagnosis and observation of therapeutic results. The usual criteria for a diagnosis of rickets were employed and the films read independently by four observers. All cases accepted for study showed both clinical and roentgenographic evidence of rickets. Serial roentgenographic pictures were made at intervals of one week in most patients. Blood calcium and phosphorus determinations were made on all cases except four, in which prematurity or general condition at the time made these procedures inadvisable.

The Vitamin D was applied as irradiated ergosterol in olive oil or in a commercial baby oil. The following procedure was used: The nurse immersed a ball of cotton 5 c.m. in diameter in one half ounce of the Vitamin D containing oil and anointed the trunk, abdomen, and extremities until no more oil could be expressed from the cotton. It was found by careful weighing that approximately 70 per cent of the oil by weight was applied to the skin. This was not rubbed in completely but allowed to remain on the skin, and the infants dressed in the usual manner. This treatment was given twice daily by the same nurse. The oil contained 975 U.S.P. units of Vitamin D per gram. With this procedure it may be estimated that approximately 11,500 units Vitamin D remained on the skin after each application. In some cases varying concentrations of Vitamin D in oil were used, and 70 per cent of the total units of Vitamin D in the day's application were considered available for absorption.

CASE NUMBER ONE

J. D., age 12 months. This black female infant was admitted to the Cincinnati General Hospital on June 14, 1938, with a diagnosis of active rickets, malnutrition and naso-pharyngitis. The infant had been receiving cod liver oil in the usual dosage for two months prior to admission. Examination revealed wide open fontanelles and marked widening of the ends of the long bones, with a rachitic rosary present. The Wasserman and Kahn were negative. The blood calcium was 10.5 mgs. per cent and the phosphorus 3.6 mgs. per cent. The infant was put on double the usual amount of rub per day, i.e., 60,000 units of which 45,210 units remained on the skin.



Case No. 1. Fig. 1—Rickets. Fig. 2—Healing, 22 days of rub. Fig. 3—Healing, 44 days of rub. Fig. 4—Healed, 44 days hospital, 63 days at home.

Roentgenograms—

1. Active rickets.
2. Healing rickets after 22 days application.
3. Further healing after 44 days application.

This case was discharged and followed in the clinic after the roentgenogram labeled No. 3 was taken. Complete healing occurred in 63 days.

CASE NUMBER TWO

Infant L. S., a premature black female, eight months gestation born at the Cincinnati General Hospital September 29, 1937. The delivery was spontaneous. The birth weight was 5 pounds 1 ounce. Examination was essentially negative except for evidences of prematurity. The general condition was fair. Wasserman and Kahn on both mother and infant were negative.

The infant was placed on routine premature care and regained its birth weight in 22 days. It was discharged from the hospital November 10, 1937, and assigned to the out-patient department for bimonthly observation. Cod liver oil, one teaspoonful three times per day, was ordered, but it is questionable whether the infant received this dosage.

X-rays of the wrist areas taken at two week intervals were negative for rickets. On April 19, 1938, at the age of almost seven months, the infant was readmitted to the Cincinnati General Hospital with the diagnosis of rickets, bilateral otitis media, and pneumonia at the right base.

The clinical evidences of rickets were marked at this time. The fontanelles, both anterior and posterior, were wide open, and craniotabes was marked. Double otitis media was present.

The chest showed evidence of bronchitis with "double" and possible broncho-pneumonia in the right lower lobe. There was marked beading of the costochondral junctions.

The edge of the liver was felt at the costal margin. The spleen was palpable 5 c.m. below the margin of the ribs and seemed firm. Movement of the extremities was painful and the joint areas tender to touch.

Laboratory—

Kahn negative.

Tuberculin—P.P.D. No. 1—negative.

Blood Calcium 10.5 mgs. per cent.

Phosphorus 2.4 mgs. per cent.

X-ray April 20, 1938 showed evidence of advanced active rickets. The regular routine and Vitamin D rub, 5000 units t.i.d., were started April 19, 1938.

Course—The infant ran a prolonged course of respiratory infection with purulent otitis media, mastoiditis and broncho-pneumonia, clearing completely June 15, 1938, two months later.

The X-rays showed no improvement of the rickets at the end of one month, and the Vitamin D dosage was increased to 20,000 units t.i.d., which dosage was continued.

The general condition improved rapidly and the child was discharged July 28, 1938, at age of ten months, weighing 11 pounds 11 ounces.

X-rays were taken at intervals of one week and showed progressive improvement.

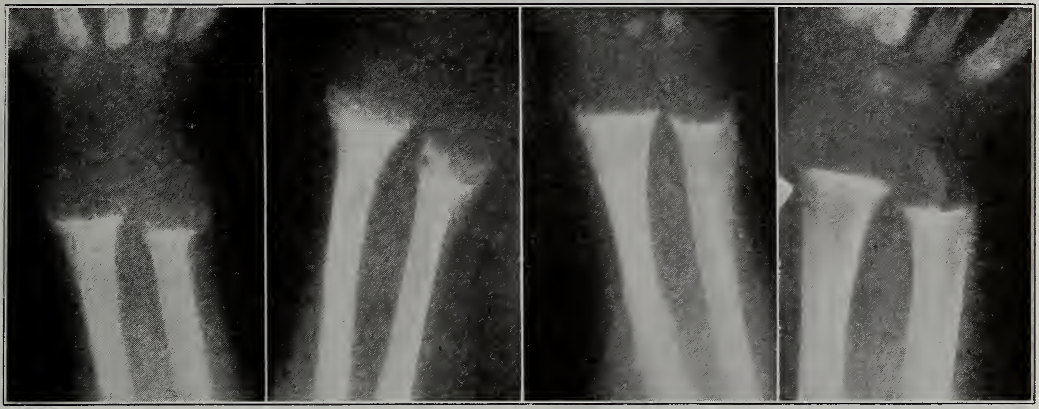
Figure No. 1—well marked rickets five days of treatment.

Figure No. 2—healing, 35 days of treatment.

Figure No. 3—well marked healing, 100 days of treatment.

Figure No. 4—late picture, 134 days healed.

In this case it is interesting to note that rachitic healing progressed in the presence of otitis media, mastoiditis, and broncho pneumonia.



Case No. 2. Fig. 1—Active Rickets, 5 days after rub. Fig. 2—Healing Rickets 35 days after rub. Fig. 3—Healing Rickets, 100 days after rub. Fig. 4—Healed Rickets, 163 days of rub.

CASE NUMBER THREE

Infant A. C., a black female infant, precipitate delivery, admitted to the premature department of the Cincinnati General Hospital on December 25, 1936.

Birth weight 3 pounds 14 ounces.

The history was that of an eight months gestation. The physical examination was negative except for evidences of prematurity. Wasserman-Kahn reactions were negative.

The infant was placed on routine premature care, and except for a mild attack of diarrhea about the twenty-sixth day of life, ran an uneventful course, reaching 5 pounds 14 ounces in weight at 45 days when it was discharged. There was no X-ray evidence of rickets at this time.

Because of lack of cooperation on the part of the family this child was not seen regularly. It was re-admitted to the Pediatric service of the Cincinnati General Hospital April 1, 1937, at the age of four and one-half months, with a diagnosis of pylorospasm, acidosis, tetany and advanced rickets.

The infant had lost its appetite. Vomiting had occurred frequently in the last two months. Eight hours before admission the infant had a severe convulsion lasting ten minutes.

Examination on admission showed a poorly nourished black female, three months of age. The head was larger than normal—the fontanelle was wide open, marked craniotabes extended over almost the entire occipital and part of the parietal region.

The chest was negative except for marked costochondral beading.

The abdomen was large—umbilical hernia was present. Liver and spleen were not palpable.

Extremities — moderate epiphyseal enlargement. Tibial bowing was present. Reflexes were all present and hyperactive.

Laboratory—

Kahn—negative.

P.P.D. No. 1—negative.

CO_2 combining power of blood 18 vols. per cent.

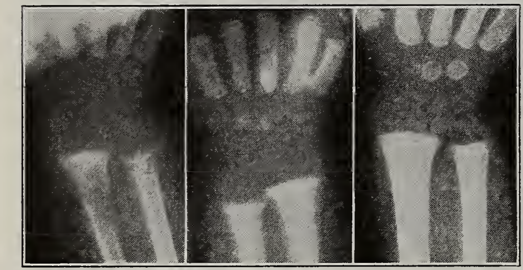
Blood calcium 6.7 mgs. per cent.

Phosphorus 4.8 mgs. per cent.

X-ray—Active rickets.

Therapy: The infant was given soda bicarbonate intravenously, human blood and calcium gluconate intramuscularly.

Vitamin D rub was given twice per day. Five days later, April 6, 1937, the blood calcium was 8.6 mgs. per cent. On April 5, 1937, the Vitamin D rub was changed to cod liver oil, one dram t.i.d., and on April 8, 1937 this was increased to two drams t.i.d. A change to haliver oil with viosterol, 15 drops t.i.d., was made on April 16, 1937. These changes were made because of a misunderstanding in orders.



Case No. 3. Fig. 1—Active Rickets after Vitamin D by mouth. Fig. 2—Healing Rickets after 28 days Vitamin D rub. Fig. 3—Healed Rickets, 131 days of rub.

X-ray at this time showed no improvement but rather an advance in the rachitic process. The Vitamin D rub was started April 20, using 15,000 units twice per day, and continued at this dosage until discharge from the hospital.

On the routine of feeding and Vitamin D rub the infant progressed rapidly and was discharged to the out-patient department May 8, 1937, five weeks after admission.

X-ray studies showed the first evidence of active rickets April 3, 1937, and first evidence of healing May 30, 1937. Completely healed August 31. 1937.

Comment:—The administration of cod liver oil and haliver oil in this case makes it difficult to evaluate exactly the effectiveness of the Vitamin D rub.

CASE NUMBER FOUR

Infant M. G., white female, born at the Good Samaritan Hospital October 10, 1938. Normal delivery, birth weight 7 pounds 12 ounces.

Wasserman—negative. This infant received no Vitamin D as cod liver oil.

On March 22, 1939, examination showed definite clinical signs of rickets as evidenced by large head, craniotabes, rachitic rosary, Harrison's groove and epiphyseal enlargements. The infant was unable to sit. Weight at this time was 18½ pounds.

X-ray examination March 22, 1939 (age five months), showed evidence of mild rickets.

The infant was given Vitamin D rub, 10,000 units once per day.

Clinical improvement was marked and in ten days the craniotabes disappeared.

X-ray April 11, 1939 showed healing. The infant remained in the hospital until July 4, 1939 (age nine months), receiving one rub per day. Development continued in a normal manner until discharge.

CASE NUMBER FIVE

Infant S. H., a while male infant, age nine weeks, brought to the Good Samaritan Hospital December 14, 1936, in convulsions.

The mother stated that on the morning of December 13, the infant began to "twitch and jerk" in the arms and legs. This lasted for a few minutes. A similar attack occurred in the afternoon, but was more severe, the patient becoming cyanotic. Mild attacks occurred about every two hours during the night.

This patient had been delivered by caesarian section October 3, 1936. Full term. Birth weight 5 pounds 4 ounces. The infant gained regularly and on the day of admission at nine weeks of age, weighed 9 pounds 4 ounces.

The feeding was a cow's milk and dextri maltose formula. At no time did the infant receive cod liver oil or direct sunlight. Orange juice was begun on Dec. 1, 1936.

Physical examination revealed a well nourished infant lying in bed in tetanic convulsions with carpopedal spasm. The convulsions were almost continuous.

Head—Anterior and posterior fontanelles were wide open. Weiss and Chvostek phenomena were present.

Neck—The skin was covered with a red, raw, weeping eczematous eruption.

Thorax — Costochondral junctions somewhat enlarged.

Lungs and heart essentially negative.

Abdomen—prominent. Liver and spleen not palpable. Bilateral congenital inguinal herniae were present and easily reduced.

Extremities—carpopedal spasm present. Trousseau's sign was elicited.

Laboratory—

Blood calcium 5.8 mgs. per cent.

Unfortunately a blood phosphorus was not made.

X-ray of wrists and ankles showed active rickets.

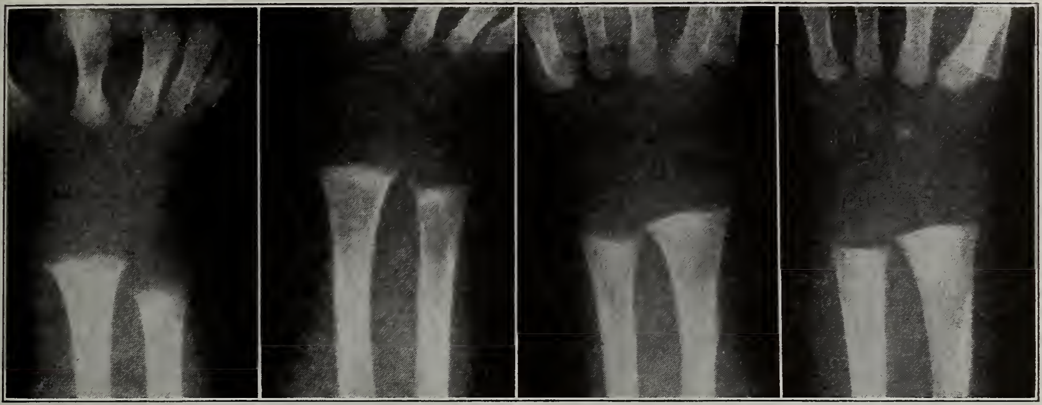
Therapy—Calcium gluconate was administered intramuscularly and by mouth. The convulsions ceased in two days, but carpopedal spasm remained for 10 days intermittently. Calcium was given for 14 days.

The Vitamin D rub—13,000 units morning and evening—was started along with the calcium therapy.

In two weeks the infant developed a diarrhea, and after this was given its original milk and dextri maltose formula.

On January 8, 1937, three weeks after admission, the patient had a severe gastointestinal upset, with diarrhea, vomiting and dehydration necessitating the administration of 150 cc. of 5 per cent glucose in saline and 120 cc. of blood intravenously. Recovery from this acute condition was prompt. From this time on the course was uneventful and development normal.

The X-ray series showed no improvement for



Case No. 5. Fig. 1—Rickets. Fig. 2—Rickets 23 days later. Fig. 3—Healing Rickets 36 days later. Fig. 4—Healed 69 days later.

2½ weeks, December 14, 1936, to January 6, 1937, but thereafter improvement was rapid.

CASE NUMBER SIX

Infant R. P., a black male infant born at the Cincinnati General Hospital June 10, 1937. Normal delivery, birth weight 4 pounds 6½ ounces, gestation period uncertain.

The course in the premature department was uneventful until the twenty-ninth day, when the infant developed a moderately severe gastroenteritis which responded promptly to rountine therapy. The infant was discharged to the outpatient dispensary August 4, 1937, weighing 5 pounds 13 ounces.

Due to lack of cooperation on the part of the mother, little Vitamin D rub was given to the infant. It was readmitted to the hospital November 23, 1937, at 5½ months of age, with a diagnosis of active rickets, as evidenced clinically by craniotabes, epiphyseal enlargements, and rachitic rosary. The Kahn was negative. X-ray examination showed active rickets.

Three days later the infant developed type 14 pneumococcus lobar pneumonia. The chest was clear December 15, 1937. On December 15, 1937, an abscess appeared in the right femoral region, which was incised and pneumococcus number XIV isolated from the pus. This abscess drained until February 2, 1938.

The Vitamin D rub was started when the infant was readmitted at age 5½ months, and was continued throughout its stay in the hospital. It was discharged February 19, 1938, age eight months, weighing 11 pounds.

The first positive X-ray for rickets was November 18, 1937, at five months of age. Pictures were taken weekly and showed slow progressive healing.

Comment—In spite of severe prolonged illness, healing of the rickets as shown by X-ray progressed in a satisfactory manner.

CASE NUMBER SEVEN

Infant S., a white female infant born at the Cincinnati General Hospital and admitted to the premature department February 8, 1937, weighing 1880 grams. On the twenty-seventh day, March 7, 1937, the infant developed bronchopneumonia. She was placed on routine treatment and given one blood transfusion. An X-ray picture at this time showed moderate rickets. The infant was given Vitamin D rub, 15,000 units twice per day. Diarrhea occurred at this time, which would have precluded the use of Vitamin D by mouth. The pneumonia ran a short favorable course and the infant was discharged after a 41-day stay in the hospital.

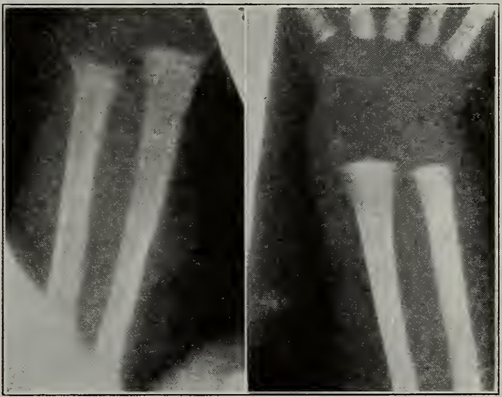
The birth weight was regained in 16 days and the weight on discharge was 2265.7 grams.

The child's course since discharge from the hospital has been uneventful, except for occasional upper respiratory infections and rubeola.

Roentgenograms—

Figure No. 1—March 4, 1937, mild active rickets.

Figure No. 2—March 18, 1937, healed rickets —14th day of rub.



Case No. 7. Fig. 1—Diagnosis Rickets. Fig. 2—Healed Rickets, 14 days after rub.

CASE NUMBER EIGHT

Infant C., a black female infant born April 26, 1936. The delivery was normal and gestation estimated at 6½ months. Birth weight was 2 pounds 6¾ ounces (1097 grams). On admission the infant was cyanotic, rectal temperature 95° F., and general condition poor. Maternal Wasserman negative.

The infant was given 20 c.c. human blood infrascapularly, placed on routine care and the regular weekly X-ray taken. On June 19, 1936, at 7½ weeks of age, there was a suspicion of X-ray rickets, and the infant was given haliver oil with viosterol (10,000 units per gram) M VIII daily. This was rapidly increased to M XXX and given until August 20, 1938, when it was discontinued and Vitamin D rub substituted, 15,000 units t.i.d.

On July 6, 1936, mild rickets was diagnosed by X-ray. On July 14, 1936, clinical evidence of rickets was present in the form of craniotabes and beginning epiphyseal enlargements. Calcium gluconate was given orally and intramuscularly at this time. The clinical picture and X-rays of wrists showed progressing rickets until September 4, 1936, i.e., 19 days after the application of the Vitamin D rub.

The course in the premature department from this time on was uneventful. The infant regained its birth weight in 32 days and reached 5 pounds 2 ounces in 120 days, when it was discharged.

October 15, 1936, the patient developed pertussis and bronchopneumonia, from which it died November 13, 1936.

Comment—In this case Vitamin D by mouth apparently did not alter the course of a progressive rickets over a period of 62 days, but improvement was evident 19 days after the application of Vitamin D to the skin. Again in this instance we appreciate the difficulty in evaluating the therapeutic efficacy of the two methods of introducing Vitamin D, when one method follows the other.

SUMMARY

Vitamin D in the form of irradiated ergosterol in oil is absorbed by the skin, as demonstrated by roentgenographic evidence of healing of rickets in a small group of infants who were receiving no other source of Vitamin D. In some instances roentgenographic evidence of healing rickets began as early as two weeks after the beginning of the application.

This study does not establish the minimum number of units of locally applied Vitamin D which is necessary for prophylaxis and cure, but it does demonstrate that the dosage is much greater than the amount necessary when Vitamin D is given by mouth.

None of the infants treated has shown any irritation of the skin as a result of the application.

The excessive cost of cutaneous application of Vitamin D in the dosage employed in this series is a disadvantage in its use.

Cutaneous application of Vitamin D is not recommended to replace the routine administration of cod liver oil or other forms of Vitamin D by mouth, but it could be used in cases where there is defective absorption from the gastroenteric tract, such as in pyloric stenosis, gastroenteric infections, and indigestion, and when there is allergic reaction to orally administered sources of Vitamin D.

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A New Method For Removal of Powder Tattoo

Report of One Case Treated by a New Method

Mrs. J. presented herself at my office after a blank cartridge exploded approximately three inches away from her face. On physical examination there were hundreds of black powder marks embedded throughout the lips, chin, nose, and cheeks.

After the removal of some of the powder marks according to the method described by H. C. L. Lindsay* I conceived a new method which I used on this patient.

Under local anesthesia the face was prepared by cleansing with ether and alcohol, then a small burr was attached to an electrical dental unit; the burr (revolving) was pressed against the skin under which the powder mark was concealed. As the burr penetrated the skin and entered the field where the powder was present, its revolving action forced the powder back to the opening made in the skin by the burr. The burr used was round, having protruding edges, which when once entering the skin exerted a rotary cutting action.

The areas of powder on the lips was not touched by this method, but was left alone. The powder was embedded in the skin from 1/16 to 2/16 of an inch.

The areas were painted with tincture of metaphen and sterile dressing applied after the powder was removed. The areas were completely healed at the end of three weeks leaving no scars. Fifteen hundred units of tetanus antitoxin was also administered.—Herman B. Kaufman, M.D., Philo, Ohio.

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* Lindsay, H. C. L.: Removal of powder tattoo by minor surgery. J.A.M.A., November, 1937, 2207-11.

Reactivated Tuberculosis Primary in Abdomen*

Case Record Presenting Clinical Problems

HERBERT S. REICHLE, M.D.

A COLORED married female, 44 years old, who had suffered from pulmonary abscess and cerebral hemorrhage eight years previously and had received insufficient treatment for syphilis, was admitted to the hospital on the service of Dr. R. L. Cox because of swelling of the lower extremities and abdomen, nausea and abdominal pain. The onset of these symptoms was said to have occurred six to 12 weeks previously and to have followed intramuscular injections of bismuth. Later gross blood appeared in the stool; more recently there was moderate diarrhea with tarry stools, anorexia and swelling of the eyelids. The patient admitted the consumption of large amounts of whiskey in former years.

The patient was obviously ill; temperature 39.4, pulse 104, respirations 24, blood pressure 156/100. The positive findings were: edema of the eyelids; arteriolar narrowing, fresh though small exudates and old hemorrhage of the ocular fundi; two small discrete lymph nodes in the left supraclavicular region; fluid wave and shifting dullness in the abdomen; moderate but generalized abdominal tenderness; and a large, smooth and slightly tender liver. The urine showed albumin, bile, casts, leucocytes and many erythrocytes. There was a moderately severe secondary anemia. The leucocytes numbered 5500, of which 85 per cent were polymorphonuclears. Repeated Kline and Wassermann tests were negative. The albumin-globulin ratio was reversed (0.68) and the total serum proteins reduced (4 Gm. per 100 cc.); whole blood cholesterol was only 126 mg. per 100 cc.

Additional information of decisive importance was supplied by the biopsy of a supraclavicular node and by the x-ray of the chest. The former showed active conglomerate tuberculosis and the latter a nodular uniform mottling of the lungs, interpreted as miliary tuberculosis. Some confusion was, however, added by a constant irregularity of the prepyloric region of the stomach and first part of the duodenum, observed both by fluoroscopy and on the films. This the roentgenologist thought was due to malignancy, possibly of the gall bladder. The fluid obtained by paracentesis of the abdomen did not, however, reveal tumor cells. The temperature fluctuated between 38° and 39° but toward the end declined to normal. The decline was marked by increasing weakness and finally coma. Death occurred 16 days after admission. The final clinical diagnosis was: *Disseminated tuberculosis, possibly miliary; tubercuosis of the left supraclavicular and axillary lymph nodes; tuberculous peritonitis; syphilis.*

Autopsy revealed a mass of fused lymph nodes which extended from the lumbosacral junction to the twelfth thoracic vertebra and entirely surrounded the aorta and large vessels. On section some contained calcium and were the seat of obviously healed or latent tuberculosis; others were frankly caseated and actively diseased. Practically all nodes of the abdomen were involved. The obstruction to the lymphatic flow had led to a lymphangiectasia of the serosa. This was probably the source of the ascites. There was, however, no peritonitis nor was there any tuberculosis of the mucosa of the gastro-intestinal tract. The only explanation for the blood in the stools was the presence of hemorrhoids. The disease of the nodes had extended to the receptaculum chyli from whence it had invaded the thoracic duct.

Microscopic section showed the lumen of the duct to be obliterated by conglomerate caseating tubercles. The chronic miliary tuberculosis of lungs, liver, spleen, kidneys, heart and serosa of abdomen is thus easily explained. The hematogenous dissemination to the liver was followed by an invasion of the bile ducts and the development of tuberculous cholangitis. This sufficiently explains the bile in the urine as well as the enlarged liver. The hepatic damage led to the low serum proteins, reversal of their ratio and the low cholesterol content of the blood. Thus the edema is explained. The clinical diagnosis of syphilis was substantiated at autopsy by the finding of luetic aortitis. However, microscopic examination did not demonstrate any activity of this process; it must therefore be regarded as "healed". Finally, the observation of the roentgenologist that there was a constant irregularity of prepylorus and duodenum is partially explained by finding a healed ulcer of the lesser curvature of the stomach and a fibrous band of adhesion 5 cm. in length between the gall bladder and second part of the duodenum. The gall bladder contained several concretions.

The miliary tuberculosis of the kidneys was accompanied by perifocal hemorrhage; the microscopic sections of the kidneys show tubules and subcapsular spaces filled with erythrocytes although there is no evidence of glomerulitis. The same condition was seen in and about the tubercles in the lungs. The occurrence of hemorrhagic diathesis in conjunction with florid tuberculosis is well known. Thus hemorrhage may even occur at the site of tuberculin test reactions. In this case the renal hemorrhage satisfactorily explains the otherwise puzzling urinary findings. The kidney sections further reveal a moderate degree of arteriolar nephrosclerosis. Thus we have a morphological equivalent at autopsy for the findings in the ocular fundi as well as for the hypertension. It would at first sight appear as if the small heart (230 Gm.) would preclude this; however, the fibers are distinctly narrow and a moderate amount of polar brown pigment is present. Hence, probably because of the tuberculosis there was brown atrophy.

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*Selected by Dr. H. T. Karsner from the Clinical-Pathological Conferences of the Cleveland City Hospital as the third of a series of cases to be published under the heading "Case Record Presenting Clinical Problems."

The observation of calcified and fibrous tubercles in the abdominal nodes warrants the assumption that these nodes must have been the seat of an abdominal primary tuberculous complex, i.e., a primary tuberculous intestinal infection, in the remote past. This is substantiated by the failure to discover any recent or remote primary complex in the lungs, either by dissection or postmortem x-ray. The activity of these nodes, which at the same time reveal old obsolete calcified tubercles, i.e. primary tubercles, permits the further assumption that we are dealing with a reactivation of a primary tuberculous infection. It is now established that such infections may heal "clinically", but "biologically" may remain active. Disturbances of the general powers of resistance such as are produced by debilitating diseases or states of malnutrition may disturb the delicate balance between the virulence of the bacilli still active in the "obsolete foci" and the resistance of the individual. In this case the tuberculous invasion of the body was obviously proceeding from the oldest lesions; namely, those in the abdominal nodes. Primary tuberculous infection of the intestine is unusual in the United States. In a study of routine autopsies in Cleveland City Hospital a freqency of only 1 per cent was found; the percentage of demonstrated pulmonary primaries was 20 per cent.

The final anatomical diagnosis was therefore: Chronic miliary tuberculosis of lungs, liver, spleen, kidneys, heart and abdominal serosa with perifocal hemorrhages of renal and pulmonary tubercles; reactivation of abdominal primary tuberculous infection; massive tuberculosis of abdominal, left axillary and left supraclavicular lymph nodes; tuberculosis of thoracic duct; lymphangiectasia of abdominal serosa; tuberculous cholangitis; arteriolar sclerosis, renal; brown atrophy of heart; ulcer of stomach, healed; cholelithiasis; fibrous adhesions between gallbladder and duodenum; luetic aortitis, healed; hemorrhoids.

This patient had obsolete tuberculosis of the abdominal lymph nodes; reactivated and generalized during the course of chronic hypertension. It is of especial interest that a heart, the seat of brown atrophy, could have maintained the high blood pressure, but the death was evidently due to the tuberculosis. As incidents there were also healed ulcer of the stomach, cholelithiasis, peritoneal adhesions, healed syphilitic aortitis and hemorrhoids.

Ocular Avitaminosis A

Our studies of the effects of intramuscular administration of Vitamin A lead to the opinion that there is a definite place for this type of treatment when rapid correction of avitaminosis A is necessary as, for example, in corneal ulceration. When faulty absorption from the intestinal tract is suspected, this method should certainly be tried.

In all of our patients the response to this method of treatment was prompt. Case 1 which appeared to be an early xerophthalmia almost completely recovered in one week after 40,000 units were administered; the diet was not revised until after the effects of the intramuscular injections had been observed. Two other patients with a history of definite dietary restriction of Vitamin A also showed a prompt improvement of the ocular manifestations. In one of these two cases (Case 2) frequent recurrence of corneal desquamation apparently was controlled by burbot-oil injections after other methods of treatment had been unsuccessful.

Case 5 also failed to respond to treatment until intramuscular Vitamin A therapy was instituted. In this instance adequate doses of cod liver oil had been administered for two years, only being discontinued two months prior to being seen; yet, the light threshold indicated avitaminosis A. The absorption of the vitamin from the intestinal tract must have been inadequate, or, if it were adequate, the storage of Vitamin A in the liver was faulty. Prior to the ocular disorders the general health had been good and an internist who had followed this case for two years was unable to find any cause for the avitaminosis. The pathologic pictures of Cases 3 and 6 were complicated by the presence of corneal vascularization. Riboflavin may have been chiefly responsible for the satisfactory result, but the possible relationship of the functions of riboflavin and Vitamin A suggested that they be used simultaneously.—H. C. Kluever, M.D., C. H. Coughlan, M.D. and Loran M. Martin, M.D., Fort Dodge; Jour. Iowa S. Med Soc. Vol. XXX, No. 12, December, 1940.

The proper treatment of living cases of tuberculosis is fortunately also the humane, the scientific, and the effective method for its prevention. The proper care of the sick secures the protection of the well.—Homer Folks, 6th Inter. Tuber. Congress, Sept., 1908.

Tuberculosis Abstracts

Review for Physicians Issued by the National Tuberculosis Association and Distributed by Component Society, the Ohio Public Health Association

IMPORTANCE OF THE TUBERCULIN TEST

TEN years ago to say a student had tuberculosis really meant that he had consumption. It was the tuberculosis diagnosed by the ancient Chinese, Babylonians, Greeks and all since their time. A more recent and more logical conception of tuberculosis is that it begins when the first neutrophile phagocytoses a tubercle bacillus and the outcome depends upon subsequent physiologic events. From three to seven weeks after tubercle formation begins, the tissues are sensitized to the protein fraction of the tubercle bacillus and apparently remain so as long as tubercle bacilli are alive in the body. This sensitivity is determined by the tuberculin test. The tubercles may be microscopic in size and there is no way of determining in a given individual whether clinical tuberculosis will ever make its appearance. Since the body is seeded with tubercle bacilli, clinical lesions may appear at any time and in almost any place. Therefore, all who react to tuberculin have tuberculosis.

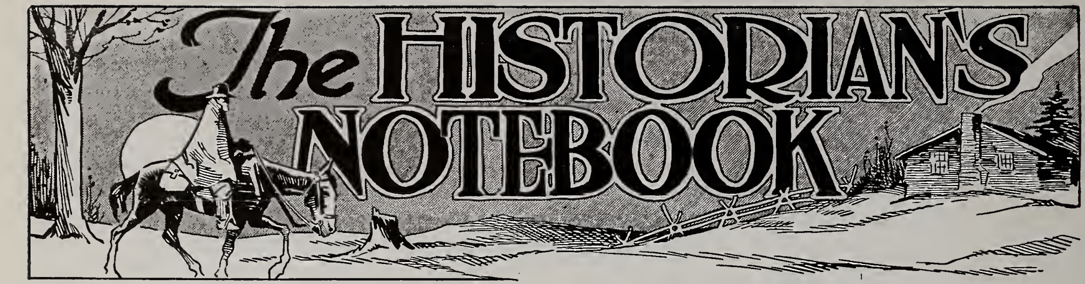
"Even if we could be certain that in the tuberculin reactors there are at the moment no lesions except those of the primary complexes, we have no way of determining what minute acute or chronic clinical lesions will develop or where they will be located. The reactor whose complete examination is negative today may have tuberculous meningitis, miliary disease, tuberculous pneumonia, peritonitis, pleurisy with effusion or synovitis, tomorrow."

Chronic clinical tuberculosis is essentially a disease of adults—it only begins to get into its stride in the college and university age period. Therefore, we find only a small percentage of tuberculin reactors with chronic, clinical tuberculous lesions during their few student years, yet it is of great importance that their disease be detected before it become contagious.

"Occasionally one asks why it would not be better to omit the tuberculin test and proceed directly to the X-ray film inspection of the chest, since the occasional person has spoken of this inspection as the best case-finding method. No student of tuberculosis could be satisfied with such a procedure because the X-ray film examination is totally inadequate in determining the true tuberculosis situation in any student body. Such examination is limited to a small part of the body; indeed, it does not include more than 75 per cent of the lungs themselves. Moreover, it reveals evidence only of gross lesions and does not differentiate these with reference to etiology, tuberculous or nontuberculous. We divide pathology into gross and microscopical for teaching and practical purposes. The X-ray reveals only the gross. For example, among those who have primary tuberculosis complexes in the body, the X-ray film of the chest reveals evidence of their presence in only approximately 10 to 15 per cent. The student of tuberculosis demands something far more delicate than the X-ray film and he finds it in the tuberculin test.

"It would be as futile to try to control tuberculosis without the tuberculin test as to try to control syphilis without the Wassermann or an equally good test. At the University of Minnesota we have in the neighborhood of 4,500 entering students each year and the tuberculin test indicates that approximately 1,000 of them have the first-infection type of tuberculosis somewhere in their bodies; that is, primary tuberculosis complexes have been established, and to us the tuberculin reaction means that living tubercle bacilli are present. Among our reactors, only 100 to 150 present any evidence that might be interpreted as representing the primary tuberculosis complex on the X-ray film of the chest. Of the entire 1,000, rarely more than 10 to 15 have, at the moment, lesions in the lungs which cast shadows that might be due to the clinical form of pulmonary tuberculosis. Thus, if we depended entirely on the X-ray film examination, we would overlook 85 per cent or more of the students who actually have tuberculous lesions in their bodies. Each of the 1,000 students who reacts to the tuberculin test is a potential clinical case of tuberculosis some time in life and in the occasional one this form of the disease will actually occur while in school. Therefore, we feel that this group of 1,000 students should be listed and observed from year to year for clinical tuberculosis, just as one lists those who have not been immunized against small-pox or diphtheria as the susceptibles in case of an outbreak of one of these diseases on the campus."

Experience in eradicating tuberculosis in cattle justifies our faith in the tuberculin test. "The veterinarians of this country have made more than 217,000,000 tuberculin tests on cattle between 1917 and 1939. The carcasses of more than 3,700,000 reactors were examined postmortem, and the accuracy with which the test selected those with tuberculous lesions was little short of miraculous. Indeed, it was only through the tuberculin test as the detective that tuberculosis has been almost eradicated from the cattle herds of this nation."—J. Arthur Myers, M.D., Amer. Rev. of Tuber., Feb. 1941.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

The Role of the "District" as a Unit in Organized Medicine in Ohio[1]

ROBERT G. PATERSON, PH.D.

USE of the "district" as a basic unit of medical organization and administration is, historically, the oldest in the state. It antedates the county, city and state medical societies. A "district" in the sense in which it is used here includes within its area two or more counties. From 1811 to 1902 the history of medical organization in Ohio is full of the trial and error method in attempting to find a satisfactory unit or units as the basis for local organization.[2]

BROAD OUTLINE OF DEVELOPMENTS

Beginning in 1811 and continuing to 1833, known as the legal period of organization, the laws of the state established medical districts in the then existing counties. "The first of Ohio's 88 counties (Washington) was established in 1788. The last revision in the boundaries (Auglaize, Logan) was made in 1888, exactly one hundred years later."[3] By 1833 there were 70 counties in the state. Population was sparse and scattered. The 1830 census showed 937,903 population. Physicians were few in number and likewise scattered. Roads and transportation were primitive. So it was natural for the state legislature to adopt the district as the basis for the establishment of local boards of censors the prime purpose of which was to license physicians to practice within the state. The law of 1812 went one step further when it provided for a state medical convention to be composed of representatives from each of the five medical districts. From 1811 the number of districts grew from five until in 1833 there were 22 districts set up. After the repeal of all such laws in 1833 physicians had no means of congregating in meetings other than those of local scope. The first of these was the Cincinnati Medical Society organized in 1819.

The Author

● **Dr. Paterson, Columbus, Ohio, is Executive Secretary, Ohio Public Health Association; Corresponding Secretary, Ohio Committee on Medical History and Archives.**

In 1835 the first form of voluntary state medical organization was created. It was known as the "Ohio Medical Convention". The present Ohio State Medical Association rightly traces its origin to this date. The convention continued to 1851 when it was merged with the Ohio State Medical Society organized in 1846. At first members of the state convention were listed individually from counties. By the time the State Society was organized, Ohio had been divided into 83 counties. Population had increased to 1,980,329 in 1850. Physicians also had increased in number. Transportation and the means for travel had improved vastly. Roads and canals had been spread in every direction throughout the state.

Since the state meeting occurred but once a year there was a growing demand upon the part of physicians for some medium through which they could gather together more frequently to discuss their professional problems. These media took two forms—the county medical society and the district medical society. One of the earliest considerations before the state society was the matter of determining what should constitute an auxiliary society. In 1857 it was deemed necessary to incorporate in the constitution of the State Society a provision which sought to improve reports from the local societies both district and county. With variations this attitude was continued until 1902 when all district societies were excluded as auxiliaries and the county form was adopted as the sole unit of organization.

LEGAL PERIOD OF DISTRICT MEDICAL ORGANIZATION

A more detailed examination of the legal period of district medical organization reveals a number of interesting developments and merits attention at this point.

Dr. Samuel Prescott Hildreth of Marietta was elected to the House of Representatives from Washington County in 1810. Almost immediately after taking his place in the General Assembly he introduced a bill seeking to give the state some measure of control over those individuals who sought to heal the sick. In a preamble to the bill[4] it is stated "Whereas the practice of physic and surgery is a science so immediately interesting to society that every encouragement for its promotion should be given, and every abuse of it, so far as possible suppressed".

The law, effective January 14, 1811, divided the state into five medical districts. A board of three medical censors or examiners, members of which were named in the law, was provided in each of the five districts. The boards were to meet on the first Monday of June and November at designated centers, viz: Cincinnati, Chillicothe, Athens, Zanesville, and Steubenville. Examination of the membership of these five district boards reveals some illustrious names in the annals of medical history in Ohio. They are as follows:

District 1. Joseph Canby, Richard Allison, Daniel Drake.

District 2. Edward Tiffin, Alexander Campbell, Joseph Scott.

District 3. Leonard Jewit, Eliphas Perkins, Samuel P. Hildreth.

District 4. John Hamm, John J. Brice, Robert Mitchell.

District 5. George Wilson, John M'Dowell, Thomas Campbell.

At the very next session of the General Assembly, the law of 1811 was repealed and a new law[5] enacted, effective February 8, 1812. Again we find a preamble stating "Whereas well regulated medical societies have been found useful in promoting the health and happiness of society by more generally diffusing the knowledge of the healing art, and thereby alleviating the distress of mankind." Seven districts were created and out of these seven districts there was created by law a state society styled "The President and Fellows of the Medical Society of the State of Ohio". The law listed 120 physicians throughout the state who were to constitute the society. Places of meetings of the district representatives were designated as Cincinnati, Chillicothe, Athens, Zanesville, Steubenville, Warren and Dayton. Meetings were to be held on the first Monday in June. These district societies were empowered to elect not less than two nor more than three representatives to the state society which was to meet in Chillicothe on the first Monday of November. A quorum of ten members was required for this state meeting.

On November 2, 1812, there gathered at Chillicothe five delegates from the first and second districts. These hardy souls were: Daniel Drake, Cincinnati, and Joseph Canby, Lebanon, from the first district; Samuel Parsons, Franklinton; and John Edmiston and Joseph Scott, Chillicothe, from the second district. It is not clear at the present time whether the other five districts actually appointed delegates. If they did the delegates failed to make their appearance. Even Dr. Hildreth, the author of the first law, did not attend. Since the law specified a quorum of ten members no convention was held.

At the next session of the General Assembly this law was repealed and a return[6] made to the law of 1811. Between 1813 and 1821, the General Assembly amended, repealed and enacted the law on three[7] separate occasions.

On February 26, 1824, the General Assembly passed a new law[8] entitled "An Act to Incorporate Medical Societies for the Purpose of Regulating the Practice of Physic and Surgery in this State". It repealed the law of 1821 and remained in force, with minor amendments, until 1833 when it, too, was repealed. Again, we find the pious preamble to the effect that "whereas, well regulated medical societies have been found to contribute to the diffusion of true medical science, and a correct knowledge of the healing art."

With the rapid growth in population of the state and the increase in the number of counties, which now numbered 70, it became necessary to divide the state into 20 medical districts. The counties comprising each district were enumerated and the names of physicians constituting each district medical society were given. With variations this method was continued by the General Assembly until 1833 when all such laws were repealed.

Thus closed the first period of medical organization in Ohio. Regulation through legislation had proved a dismal failure. It was not until 1868 that a return to this method is to be noted and the law then enacted was so weak in its effects that in 1896 the General Assembly finally set up the present form of regulating the practice of medicine.

VOLUNTARY PERIOD OF DISTRICT MEDICAL ORGANIZATION

Between 1833 and 1835, the physicians throughout the state had no means by which they could gather together for discussion of their professional problems except for the few local medical societies which existed. In 1835 the organization of "The Medical Conventions of Ohio" on a voluntary basis was effected. These continued until 1851. Membership in these conventions was open to all regular physicians throughout the state on an individual basis. This situation continued to exist until 1846 when the Ohio State Medical Society was organized.

The Ohio State Medical Society soon became a delegated body and scores of local medical societies sprang up either as auxiliary to or independent of it. A study of the Transactions of the Ohio State Medical Society reveals that one of the earliest considerations before it was the matter of auxiliaries. From its auxiliaries, the state society drew its strength and it constantly promoted local organization. It frequently found reason to quarrel with its component societies and in many cases refused to admit a local society because its constitution did not embrace some code of ethics which was deemed essential.

The development of the Constitution of the Ohio State Medical Society gives an insight to the story of district societies. The first formal recognition of the need for a plan for auxiliaries is found in a report[9] of the committee on a new constitution and code of By-Laws and a plan for the organization of auxiliary societies. This plan which was adopted May 16, 1848, was:

> "Associations desirous of becoming auxiliary, must furnish to the Committee on Medical Societies a copy of their Constitution and By-Laws, and a list of their members. The Committee will report thereon, a majority vote of the Society, admitting as members the President and Secretary, ex-officio, together with one delegate for every ten members the proposed auxiliary society may consist of. Delegates will present to the State Medical Society, such papers, etc., etc., as the Association they represent may select, copies of which they will deposit with the Committee on Publication.
>
> In questions of a general nature affecting the profession of the State, should the yeas and nays be demanded, the delegates, on producing the individual authority of each, may vote by proxy for absent members of the State Medical Society, who are also members of the same Association with the delegate.
>
> Auxiliary Societies will, so far as possible, contribute to the furtherance of the objects of the State Medical Society, by selecting from their own archives such original papers, essays, reports, and especially statistics, as they may deem of sufficient value, on every subject connected with medical science".

In 1850 a listing of auxiliary societies showed the following:

	Auxiliary No.
1849—Hamilton County Medical Society	1
1849—Warren County Medical Society of Lebanon	2
1849—Clark County Medical Society	3
1849—Lancaster Medical Institute	4
1849—Preble County Medical Society	5
1850—Meigs County Medical Association	6
1850—Wayne County Medical Association	7
1850—Richland County Medical and Surgical Society	8
1850—Medical Association of Adams, Brown & Clermont	9
1850—Stark County Medical Society	10
1850—Erie County Medical Society	11

In 1857, it was deemed necessary to incorporate in the Constitution of the Ohio State Medical Society something which would improve reports from the local societies. From the first, auxiliaries had been requested to submit annually a "catalogue" which included a list of its members, papers and similar information. The local societies were very dilatory in complying with this request and the State Secretary reprimanded them every year in his report. Even after the amendment of 1857 the reports were unsatisfactory. The State Secretary frequently changing each year, appears not to have performed his work very well.

The State Society was still recognizing District Societies in its Constitution as late as 1891. The State Secretary in 1893 pointed out that the work of the County Societies was anything but satisfactory. He lamented the general inactivity of the County Societies and gave the impression that they were losing the position of importance which the State Society had hoped for them. He said: "Why this state of lethargy or inactivity or lack of interest in the county societies? The fact is very prominent that the county societies, which are least active, are located within the boundaries of flourishing district societies. Without hastening to condemn the district societies, for their success must be prima facie evidence that they are supplying a real demand in medical society work, we must conclude that they are depriving the county societies, if not also the State Society of the interest that should be taken by them".[10]

This struggle between the County, District and State Society is to be noted each year until in 1902 when the State Society changed its constitution to comport with that of the American Medical Association. Article III of the constitution read: "Component societies shall consist of those county medical societies which hold charters from this Association". The adoption of this provision marked the downfall of District Medical Societies in Ohio.

So far as can be ascertained the District Medical Societies which were organized in Ohio and which were represented in the Ohio State Medical Society by delegates were:

Date organized—

1847, January 21—Medical Association of Adams, Brown and Clermont.[11] This was the first district medical society in Ohio and was the first such auxiliary of the State Society. It continued as such until 1884 when it disappears from the rolls of the State Society. One cannot be sure if the organization was really active until 1884 or if the state secretary was careless in preparing his reports.

Records do not reveal the organization of another District Medical Society in the state for 17 years when there was organized:

1864, April 12—The Union Medical Association of Columbiana, Mahoning, Portage, Stark and Carroll counties.[12] This Society was composed of physicians of the "old school" or what is termed by them "regular practice" and from the original faith and practice it never departed. A committee of five was appointed in 1866 to effect an organization of county societies in the counties composing the Union. This is the only instance that was found where such an action was taken by a District Society. It continued as an auxiliary of the State Society until 1902.

1867, October 22—Union District Medical Association. This society is unique in Ohio in that it included counties in both Ohio and Indiana. At first it included Union County (Indiana) Medical Society and Butler County (Ohio) Medical Society. Later Fayette and Franklin counties (Indiana) and Preble County (Ohio) were added. This society never became an auxiliary of the State Society. Delegates were sent to the State meetings in both Ohio and Indiana. On April 27, 1939, it held its 142nd semi-annual meeting at Eaton, Ohio.[13]

1869, June 14—Central Ohio Medical Society. This society became an auxiliary of the Ohio State Medical Society July 1, 1869. It met quarterly and drew most of its membership from Columbus and vicinity. From the record the society existed as a paper organization after 1896. The last meeting of which we have record was a joint session with the northwestern Ohio Medical Society in 1903.

1869—Northwestern Ohio Medical Association. The actual date of organization of this body is obscure. It was admitted as an auxiliary of the Ohio State Medical Society in 1869 and continued as such until 1902. In 1892 it assented to Article 3, Section 10 of the state constitution and thus was allowed to continue as a component society. In that year, the list of members which appeared in the Transactions[14] numbered 255. The State Society had only 428 members at this time. However, this statement should be qualified by stating that there were probably incomplete returns of the State Society's membership from local societies. The last official trace of the society is in 1903.

1870—Union Medical Association of Northeastern Ohio. Again, the actual date of organization of this society is obscure. It was admitted as auxiliary of the Ohio State Medical Society in 1870. The membership was drawn from nine counties in northeastern Ohio and does not seem to have exceeded 250 at any one time.[15]

1877, June 13—The Miami Valley Medical Society. This society drew its membership from Clermont, Hamilton and Warren counties at the time of organization. Later it extended its area to include Butler, Clinton, Greene and Highland counties. In 1901 the society had a membership of only 97 members when there were 1228 physicians in the counties comprised in the district.[16] The society existed as late as 1907 when the 30th annual meeting was held at Loveland, Ohio, October 8.

1881, March 31—North Central Ohio Medical Society.[17] This Society was organized at Mansfield, Ohio, largely through the active efforts of Dr. Robert Harvey Reed. It was accepted as an auxiliary of the Ohio State Medical Society in 1881 and continued as such until 1902. Its membership was never large not exceeding 100 in the best years.

1889, August 31—Southwestern Ohio Medical Society.[18] This society was organized at Cincinnati and included 24 counties in its area from southwestern Ohio. Meetings were held twice a year. Its membership numbered around 100. It never became an auxiliary of the Ohio State Medical Society. When it ceased to function is shrouded in obscurity.

1892—The Eastern Ohio Medical Association.[19] This society embraced Belmont, Columbiana, Harrison and Jefferson counties in its area. It was admitted as an auxiliary of the Ohio State Medical Society in 1894 and remained as such until 1902. Its membership never exceeded 100.

In addition to the District Societies listed there were a number of others organized about which data are fugitive. These were:

Northern Ohio District Medical Society organized sometime in the early 90's. This society was probably a combination of the three District Societies in the northern part of the state and seems to have been designed to promote a legislative program.

Muskingum Valley District Medical Society organized in the later 80's. This society became an auxiliary of the Ohio State Medical Society in 1886 and disappears as such after 1891.

Midland Medical Society of Fayette and adjoining counties. This organization was rejected by the Ohio State Medical Society and never appears in any lists.

Delamater Medical Association of Norwalk and vicinity. It is doubtful if this society comes within the definition of a "District Society". The transactions show that it was admitted as an auxiliary of the Ohio State Medical Society in 1859 and dropped in 1870.

Athens, Morgan and Washington Medical Association. Very little can be learned of this organization. It appears to have been the second district society to become an auxiliary of the Ohio State Medical Society. This was in 1855. It was dropped from the rolls in 1884.

Northeastern Ohio Medical Association. Nothing was learned about the origin of this society. It was admitted as an auxiliary of the Ohio State

Medical Society in 1870. It disappears from the rolls in 1892.

Southeastern Ohio Medical Association. This body was admitted as an auxiliary of the Ohio State Medical Society in 1890. It was dropped from the rolls in 1892.

Ashtabula, Lake and Geauga Medical Society. Facts relative to this society are difficult to obtain. It was active in the middle 90's.

So we find the period 1846 to 1902 filled with the activities of physicians organized on a district basis. Unfortunately, the records are difficult of access or do not exist. There are physicians in Ohio still alive who have knowledge of one or more of such organizations and what a contribution these men could make to medical history in Ohio if they would set themselves to the task of detailing such histories.

After 1902 the "district" came back into use by the Ohio State Medical Association as a basis for membership in the "Council". The struggle between the "County Society" and the "District Society" was resolved by using the "County Society" as the basis for membership in the State Association and the creation of the House of Delegates as the legislative body representing county societies. The component county societies were then grouped into Districts for the purpose of creating a Board of Directors of the State Association which is known as the "Council" with one representative from each of the districts of which there are eleven at the present time.

REFERENCES

1. A paper prepared for the second annual meeting of the Ohio Committee on Medical History and Archives, April 5, 1940, held at Columbus, Ohio. Publication through the courtesy of The Ohio State Archaeological and Historical Quarterly, Vol. 49, No. 4, October-December, 1940, where the article first appeared. While the period set for discussion covered the years 1835-1858 it was thought best to treat this subject as a complete unit from 1811 to 1940.

2. See: "District Medical Organization in Ohio." Guy Thompson, 1937. A M.A. thesis, Ohio State University, Columbus, Ohio.

3. Downes, R. C.: Evolution of Ohio County Boundaries. Ohio Archaeological and Historical Quarterly, 1927, Vol. 36, No. 38, p. 340 ff.

4. Laws of Ohio, 1811, V. 9, p. 19, January 14.

5. Laws of Ohio, 1812, V. 10, p. 58, February 8.

6. Laws of Ohio, 1812, V. 11, p. 28, January 19, 1813.

7. Laws of Ohio, 1817, V. 15, p. 195, January 28; 1818, V. 16, p. 105, January 30; 1820, V. 20, p. 162, February 20.

8. Laws of Ohio, 1823, V. 22, p. 142, February 26, 1824.

9. Transactions of the Ohio State Medical Society From Its First Organization in 1846 to the Close of Its Last Session in 1850. with Addresses and Essays. Columbus Steam Press of S. Medary, 1850, p. 5.

10. Transactions, 1893, p. 7-8.

11. The Western Lancet and Hospital Reporter, 1848, V. 7, p. 285.

12. Brant and Fuller. History of the Upper Ohio Valley, Madison, Wis., 1891, V. 2, p. 161.

13. Ohio State Medical Journal, V. 35, No. 6, June, 1939. p. 636.

14. Transactions, Ohio State Medical Society, 1892, p. 18.

15. Transactions, Ohio State Medical Society, 1901, p. 473.

16. Lancet-Clinic, 1907, Vol. XCVIII, p. 336.

17. Mansfield Herald, April 7, 1881.

18. Cincinnati Lancet-Clinic, 1889, Vol. 62, pp. 257-8.

19. Columbus Medical Journal, 1894-5, V. 13, pp. 65-72.

Sectional Meeting of College of Surgeons in Pittsburgh

March 17, 18 and 19 have been set as the dates for a Sectional Meeting of the American College of Surgeons in which the states of Pennsylvania, Ohio, Virginia, West Virginia, Delaware, Maryland, New Jersey, New York and District of Columbia will participate. Headquarters will be at the William Penn Hotel, Pittsburgh.

The 21 approved hospitals of Pittsburgh will hold operative and non-operative clinics each morning during the meeting, and will also hold demonstrations of hospital procedures for the hospital executives who will attend the Hospital Conference which will also be sponsored by the College during the same three days.

Distinguished surgeons from all parts of the country will address the scientific sessions and lead the conferences and panel discussions. Among them will be the president of the College, Dr. Evarts A. Graham, professor of surgery, Washington University Medical School. St. Louis. At the headquarters hotel there will be educational and scientific exhibits and showing of motion pictures portraying surgical and hospital procedures. Daily bulletins will be issued listing the various clinics, sessions, conferences, and other events of each day. A large public meeting on the subject of "Conservation of Health" on the evening of the third day will be the final feature.

The medical profession at large, as well as hospital trustees, superintendents, pathologists, dietitians, and other hospital executive personnel, are invited to attend.

Speakers and leaders and collaborators in panel discussions include: Dr. C. C. Higgins, Dr. Donald M. Glover and Dr. George W. Crile, Jr., Cleveland. Members of the Ohio State Executive Committee of the American College of Surgeons are: Dr. Carl R. Steinke, Akron, chairman; Dr. Verne A. Dodd, Columbus, secretary, and the following counsellors: Dr. Elmer R. Arn, Dayton; Dr. Thomas E. Jones, Cleveland, and Dr. Lewis F. Smead, Toledo.

Tests for Intoxication Booklet

The 1940 report of the Committee on Tests for Intoxication of the National Safety Council has just come off the press. Tolerance to alcohol, specificity of chemical tests, compulsory tests and the handling of intoxicated pedestrians are among the subjects discussed in the report. Included also is a complete summary of recommendations for handling drunken drivers. Physicians who are interested can receive copies of the report at no charge by writing the National Safety Council, 20 North Wacker Drive, Chicago, Ill.

Proceedings of The Council

Action Taken on N.Y.A. Health Program; Legislative Measures Are Considered and Policies Adopted; Other Business Transacted

A REGULAR meeting of The Council of the Ohio State Medical Association was held on Sunday, February 16, 1941, State Headquarters Office, Columbus. The following officers and councilors were present: President Skipp, President-Elect Paryzek, Past-President Smith; Drs. Noble, McCormick, McNamee, Rutledge, Swan, Seiler, Sherburne, and Burley. The meeting also was attended by the following members of the Committee on Public Relations and Economics: Dr. Hein, chairman, Drs. Walker, Swartz and Platter; the following members of the Sub-Committee on Legislation: Drs. Heusinkveld, Fitch, Sawyer, Calhoon, Shilling, Slosser, Harris, and Brindley; Dr. Brush and Dr. Kiely, delegates to the American Medical Association; Dr. Wilzbach, Cincinnati, chairman of the Sub-Committee on Public Health Education; Dr. Forman, Editor of *The Journal*; Executive Secretary Nelson and Assistant Executive Secretary Saville.

The minutes of the last meeting of The Council, held on December 8, 1940, **were approved** as published in the January, 1941, issue of *The Journal* on **motion** by Dr. Smith, seconded by Dr. Sherburne and **carried.**

Membership—Membership statistics were reported as follows: Membership of 5,163 on February 16, 1941, compared to 5,156 as of the same date a year ago and to 6,475 as of December 31, 1940.

Members of The Council reported on visits to and activities in their respective Councilor Districts.

N.Y.A. HEALTH PROGRAM

Dr. Hein, chairman of the Committee on Public Relations and Economics reported on several conferences held with officials of the National Youth Administration of Ohio on the proposed N.Y.A. health program in this state. The proposed program was discussed by Dr. Wilzbach, recently selected by the N.Y.A. as medical adviser, and by various member of The Council. On **motion** by Dr. Smith, seconded by Dr. Sherburne and **carried,** The Council officially **approved** a statement of policy on the N.Y.A. health program which had been agreed to on the previous day at a conference of the Committee on Public Relations and Economics and N.Y.A. officials.

(See pages 270-271, this issue, for article on N.Y.A. health program and official statement of policy adopted by The Council for the guidance of county medical societies.)

LEGISLATIVE ACTIVITIES

A report on the progress of House Bill 51, the Enabling Act for Medical Service Plans, introduced into the 94th Ohio General Assembly by Miss Margaret Mahoney, State Representative, of Cleveland, and actively sponsored by the Ohio State Medical Association, was presented by Dr. Hein on behalf of the Committee on Public Relations and Economics and the Sub-Committee on Legislation. Various members of the Legislative Committee and members of The Council took part in the discussion which followed.

(See special article in this issue on the Enabling Act.)

Dr. Hein also presented a long report on behalf of the Committee on Public Relations and Economics on approximately 95 legislative proposals having a medical or health angle, now pending in the General Assembly. He informed The Council that the committee, on the previous day, had reviewed most of these proposals. Many of them were analyzed for The Council by the Executive Secretary. On **motion** by Dr. McCormick, seconded by Dr. Paryzek and **carried,** The Council officially **approved** the recommendations made by the Committee on Public Relations and Economics relative to the various legislative measures.

The Council then listened to a discussion of a proposal "to legalize the practice of Christian Science" being sponsored in the General Assembly, by the Christian Science Church, presented by two representatives of that church, appearing before The Council at their request.

JUDICIAL QUESTIONS

The following report from the Judicial and Professional Relations Committee, presented to The Council on behalf of Dr. Kramer, chairman of that committee, was **approved,** on **motion** by Dr. McNamee, seconded by Dr. Sherburne and **carried:**

Pursuant to action of The Council on May 13, 1940, the Judicial and Professional Relations Committee has given consideration to the possibility of amending the Constitution and By-Laws of the Ohio State Medical Association in such a way that physicians engaged in certain governmental services or in teaching positions in Ohio, but who do not hold a license to practice medicine and surgery in Ohio, would be eligible to membership in the Ohio State Medical

Association in the same manner as licensed physicians engaged in active practice.

By unanimous vote the committee recommends to The Council that action on this question be deferred. The reason for this recommendation is that the House of Delegates of the American Medical Association at the 1940 Annual Session of the A.M.A. last June adopted a recommendation of the Reference Committee on Amendments to the Constitution and By-Laws of the A.M.A., authorizing the Judicial Council of the A.M.A. to submit to the House of Delegates of the A.M.A. at the 1941 Annual Session clarifying provisions relating to eligibility to membership in the national society.

It is the belief of the Judicial and Professional Relations Committee that it would be unwise for the Ohio State Medical Association to take any action on this question until after the House of Delegates of the American Medical Association has acted, inasmuch as any action which would be taken by this Association would necessarily have to conform to changes which may be made in the Constitution and By-Laws of the parent organization, namely: the A.M.A.

A communication from the Cincinnati Academy of Medicine asking the approval of The Council of an amendment to the Constitution and By-Laws of the Academy was referred to the Judicial and Professional Relations Committee for study and recommendations.

A communication from Mrs. Purdy, President of the Woman's Auxiliary to the Ohio State Medical Association, recommending certain amendments to the Constitution and By-Laws of the Woman's Auxiliary, was presented. The Constitution and By-Laws of the Woman's Auxiliary provides that no amendments may be considered by the Auxiliary until after such proposals have been approved by The Council of the State Association. On **motion** by Dr. McCormick, seconded by Dr. Rutledge and **carried,** the proposed amendments presented on behalf of Mrs. Purdy were **approved** by The Council.

(The proposed amendments will be found elsewhere in this issue of The Journal.)

1941 ANNUAL MEETING

The Executive Secretary reported on progress on arrangements for the meetings of the House of Delegates which will be held at Hotel Cleveland, Cleveland, on the afternoon of June 3 and the evening of June 4 at the time of the 1941 Annual Session of the American Medical Association.

On **motion** by Dr. Smith, seconded by Dr. McNamee and **carried,** The Council authorized an increase in the State Association's contribution toward entertainment in connection with the American Medical Association Session in Cleveland in order that provisions may be made for meeting certain expenses of the Woman's Auxiliary. By this action the total amount was set at $2,000.00, which is to be made available to the Cleveland Committee on Arrangements of which Dr. Clyde L. Cummer is chairman.

On **motion** by Dr. Seiler, seconded by Dr. Paryzek and **carried,** The Council instructed the President to arrange for a meeting of The Council in Columbus some time during the month of May so that it would be unnecessary for The Council to meet in Cleveland at the time of the Annual Meeting unless special business, which would require action by The Council at that time, arises.

MEDICAL PREPAREDNESS

Dr. Paryzek, chairman of the Committee on Medical Preparedness, gave a detailed report on recent meetings of the committee and preparedness activities in general. He reported that a final follow-up campaign on A.M.A. preparedness questionnaires was about to be concluded and that in the near future the State Association would report to the A.M.A. the names of physicians who had not filled out the questionnaire or who had furnished information stating that they were retired, physically unfit for active practice, or "not interested" in submitting such questionnaire.

A communication from the Association of Military Surgeons of the United States, asking the cooperation of the Ohio State Medical Association in presenting programs on "medico-military preparedness" to the medical profession in Ohio, was discussed. On **motion** by Dr. Smith, seconded by Dr. Burley and **carried,** The Council officially offered the cooperation of the Ohio State Medical Association, instructing the Committee on Medical Preparedness to work with the Association of Military Surgeons of the United States in furthering this project.

MISCELLANEOUS

Dr. Hein, chairman of the Committee on Public Relations and Economics, reported that the committee on the previous day had discussed a communication from the Committee on School Health Education of the Ohio Public Health Association requesting the Ohio State Medical Association to consider a report of that committee setting forth certain recommendations pertaining to health education activities in the secondary schools of Ohio. Dr. Hein stated that his committee felt the lengthy report should be given careful study and recommended that the question be referred to the Sub-Committee on Public Health Education for analysis and a report back to the Committee on Public Relations and Economics. On **motion** by Dr. Sherburne, seconded by Dr. McNamee and **carried,** this recommendation of the Committee on Public Relations and Economics was **approved.**

A communication from Miss Bell Greve, State Commander of the Ohio Division, Women's Field

Army Against Cancer, requesting permission to designate the Ohio State Medical Association as a member of its general State-Wide Advisory Committee and to use the name of the President of the Ohio State Medical Association on the letterhead of the Field Army, was presented to The Council. On **motion** by Dr. McNamee, seconded by Dr. Seiler and **carried**, such permission was granted.

A communication from the Ohio Nutrition Committee of the Association of Land Grant Colleges and Universities, which is carrying on certain national defense activities, requesting the Ohio State Medical Association to designate someone to represent the Association on that committee, was discussed by The Council. On **motion** by Dr. Paryzek, seconded by Dr. McNamee and **carried**, The Council selected Dr. Jonathan Forman, Editor of *The Ohio State Medical Journal*, and instructed the Executive Secretary to present his name to the Ohio Nutrition Committee.

There being no further business, The Council ad'ourned to meet at the call of the President.

Attest: CHARLES S. NELSON,
Executive Secretary.

Coming Meetings

House of Delegates, Ohio State Medical Association, Cleveland, June 3-4.

American Medical Association, Cleveland, June 2-6.

American College of Physicians, Boston, April 21-25.

American Association of Anatomists, Chicago, April 9-11.

American Association of Pathologists and Bacteriologists, New York, April 10-11.

American College of Physical Therapy, Washington, D. C., Sept. 1-5.

American Dermatological Association, New Orleans, Apr. 7-11.

American Gastro-Enterological Association, Atlantic City, May 5-6.

American Roentgen Ray Society, Cincinnati, Oct. 6-11.

American Society for Clinical Investigation, Atlantic City, May 5.

American Urological Association, Colorado Springs, May 19-22.

Annual Conference, Committee on Medical History and Archives, Columbus, April 4.

Northern Tri-State Medical Association, Tiffin, April 8.

Ohio State University Post-Collegiate Medical Assembly, Columbus, April 15-17.

Auxiliary To Meet, June 2-6 at Hotel Carter, Cleveland

Hotel Carter will be the headquarters for the annual meeting of the Woman's Auxiliary to the American Medical Association which will be held in Cleveland, June 2-6, 1941. Requests for reservations should be sent immediately by members of the Woman's Auxiliary to the Ohio State Medical Association to Dr. Edward F. Kieger, Chairman of the Committee on Hotels and Housing, 1604 Terminal Tower Building, Cleveland, Ohio.

Trial of A.M.A. Opens at Washington

The trial of the American Medical Association, the District of Columbia Medical Society, the Harris County Medical Society, the Washington Academy of Surgery, and 21 individual physicians, on charges of conspiracy in restraint of trade, as prohibited by the Sherman Anti-Trust Act, began in the U. S. District Court, Washington, D. C., February 5.

This trial is the latest step in a legal battle which began August 1, 1938, when as the result of a complaint to the Anti-Trust Division of the Department of Justice by Group Health Association, Inc., Washington, D. C., the Department of Justice announced that an investigation would be made of the American Medical Association and the District of Columbia Medical Society. The Department made the customary offer of consent decree without prosecution, which was rejected. On December 20, 1938, the Grand Jury of the U. S. District Court of the District of Columbia indicted the A.M.A., three other medical societies, and 21 physicians, including Dr. Olin West, General Manager of the A.M.A., and Dr. Morris Fishbein, Editor of *The Journal of the A.M.A.* On July 26, 1939, the U. S. District Court sustained the defendant's demurrer, ruling that medicine was not a trade within the meaning of the Sherman Anti-Trust Act, and that the indictment was vague and uncertain. The U. S. Court of Appeals for the District of Columbia on March 4, 1940, reversed the District Court and remanded the case for trial.

Indications are that the trial which began on February 5 will last from four to six weeks. Beginning with the issue of February 15, *The Journal of the A.M.A.* is publishing a comprehensive report of the proceedings of the trial from week to week.

Cleveland—Dr. Clyde L. Cummer was recently re-elected treasurer of the American Academy of Dermatology and Syphililogy.

Progress Made on House Bill 51; First Hearing Held; Second Scheduled; More Activity "Back Home" Recommended; Total of 100 Bills with Medical-Health Angle Introduced

THERE are approximately 100 proposals with some medical or health angle pending before the Ninety-Fourth Ohio General Assembly now convening in Columbus. Some of these are constructive, desirable bills; some are destructive measures which should be killed; others are run-of-mine.

Of particular interest to members of the Ohio State Medical Association is House Bill 51, the Enabling Act for Medical Service Plans, introduced by Miss Margaret Mahoney, Cleveland, and actively supported by the State Medical Association. (See February issue of *The Journal* for text of the bill). In fact this bill is being sponsored by the Association, pursuant to the unanimous action of the House of Delegates at the 1940 Annual Meeting of the State Association at Cincinnati. An overwhelming majority of the county medical societies have endorsed the proposal and others are planning similar action. **Many physicians have filed verbal or written requests with members of the General Assembly, asking favorable action on House Bill 51. Numerous organizations, groups and individuals outside the medical profession are actively working for its enactment.**

FIRST HEARING HELD

The first hearing on House Bill 51 was held on February 18 before the Insurance Committee of the House of Representatives. The following speakers, representing the Ohio State Medical Association, appeared in support of the measure: Dr. Skipp, the President; Dr. Paryzek, the President-Elect; Dr. Smith, former president and chairman of the Committee on Medical Service Plans; Dr. Hein, chairman of the Committee on Public Relations and Economics; and Mr. Wayne Stichter, Toledo, legal counsel for the Association. As this issue of *The Journal* went to press, a second hearing was being planned—probably on February 25. If the Insurance Committee acts favorably on the bill and reports it out, recommending passage, efforts will be made to bring it to a vote before the House of Representatives at an early date.

There is strong sentiment among members of the General Assembly, generally, in favor of the principles underlying House Bill 51. Members, generally, are in sympathy with the purposes of the bill and with what the medical profession is attempting to accomplish, namely: To provide a wider distribution of medical care among the low-income group of Ohio, thereby improving the health of that class of citizens, and to establish a practical method whereby those people can systematically budget against the hazards of illness and medical costs.

ADDITIONAL INTERVIEWING NEEDED

A few members of the General Assembly have indicated that they are not entirely familiar with the provisions of House Bill 51 and its purposes. **Answering questions asked by those legislators and winning their support for the bill constitute a job which has to be undertaken by legislative committeemen in the home counties of those members of the General Assembly.**

Many newspapers throughout the state have commented favorably about House Bill 51, lauding the medical profession for its far-sighted attitude. Ten or a dozen excellent radio broadcasts about the bill have been presented to date under the auspices of county medical societies, the script having been prepared by the Bureau of Public Education of the State Medical Association. More than 50,000 pamphlets about House Bill 51 have been distributed through county medical society officials and members. Handbooks have been furnished to those responsible for interviews with members of the Legislature. **Additional pamphlets are available at the State Headquarters Office, Columbus, and will be furnished members on request.** Members of the Woman's Auxiliary to the Ohio State Medical Association are disseminating pamphlets and are interviewing or writing members of the General Assembly. The profession generally is making a sincere effort to convince the General Assembly that House Bill 51 should be enacted. Additional action in some communities is necessary. More physicians as individuals should take an active interest, volunteering their services to local legislative committeemen. The program to have House Bill 51 enacted has just begun. Good work has been done to date, but much more equally by good work will be necessary, not only on the part of the medical profession but by prominent, influential laymen and public groups.

MISCELLANEOUS PROPOSALS

Among other bills pending are those sponsored by osteopaths, chiropractors and Christian Scientists, extending the legal rights and privileges of those groups. **These bills should be defeated** as they would be detrimental and injurious to public health and public health administration. There are two bills, favored by the State Medical

Board, which would facilitate the work of the Board. These should be enacted. A large number of bills, dealing with public health administration and providing for certain public health programs and activities, have been presented. Several bills pertain to activities to improve facilities at and administration of state institutions for the insane and feeble minded and within the State Welfare Department. There are some weird proposals to establish costly systems of state-aid, including medical care, for certain groups of citizens. A bill to recodify and modernize the vital statistics system is being considered and should be enacted. Several dozen measures dealing with welfare activities, relief and kindred subjects are in the hopper. There is a series of bills to provide for premarital and prenatal physical examinations. A dozen or more proposals deal with the subject of Workmen's Compensation. There are bills pertaining to hospitals, homes for aged and disabled, tourist camps, the Probate Code, inspection of hotels and restaurants, blind relief, dependent children, the aged, dentists, pharmacists, coroners, etc.—all of which have some health angle.

Most of these measures have been reviewed by the Committee on Public Relations and Economics of the Ohio State Medical Association. At prolonged meetings on February 15 and 16, this committee and The Council analyzed many bills and decided on courses of action. **Local legislative committeemen will be kept informed as there are developments on bills in which the medical profession is directly interested and advice and suggestions for action "back home" will be disseminated by the Sub-Committee on Legislation through bulletins from Columbus.**

Youngstown Postgraduate Day

Four members of the faculty of the University of Wisconsin Medical School will present the program for the Annual Postgraduate Day of the Mahoning County Medical Society, Wednesday, April 30, at the Hotel Ohio, Youngstown. Speakers and their subjects are: Dr. William S. Middleton, dean and professor of medicine, "Bronchiogenic Carcinoma: A Challenge in Diagnosis and Treatment", and "Rationalized Therapeutic Experiences"; Dr. Joseph W. Gale, associate professor of surgery, "Empyema", and "Thoracic Surgical Problems"; Dr. Elmer L. Sevringhaus, professor of medicine, "Endocrine Therapy in General Practice", and "Diagnosis and Therapeutic Problems of the Climateric"; Dr. Ralph M. Waters, professor of anesthesia, "Morbidity Accompanying the Therapy of Pain", and "The Service of Anesthesiology in the Modern Hospital". Arrangements for the meeting are in charge of the Postgraduate Day Committee of the society, of which Dr. W. J. Tims is chairman.

Do You Know - - -

During the period November 18, 1940, to February 8, 1941, the health laboratory of the State Department of Health did serological tests of 43,082 blood specimens from prospective draftees for the U. S. Army. Of these, 1,157 or 2.7 per cent were positive. The percentage of positives among the white men was 1.7, there being 703 positive reactions out of 40,252 tested. There were 2,830 blood specimens of Negroes tested, of which 454 or 16.04 were positive.

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In 1940 there were 212,033 claims filed with the State Industrial Commission.

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Dr. F. P. Osgood is the new editor-in-chief of *The Toledo Academy of Medicine Bulletin.*

* * *

All of the digitalis used in the hospitals affiliated with Western Reserve University School of Medicine, Cleveland City Hospital, St. Vincent's Charity Hospital and University Hospitals, is grown on the Squire Valleevue Farm which was given to the University by the late Andrew Squire.

* * *

Among recent gifts to the University of Cincinnati was one of $1,000, representing $250 each from three sisters and a brother of the late Dr. Albert H. Freiberg, as a nucleus for an Albert H. Freiberg fund in orthopedic surgery.

* * *

A bill has been introduced in the Massachusetts legislature which would require surgeons to meet a special set of standards and qualifications.

* * *

During the last World War, Dr. D. C. Houser, Urbana, past-president of the Ohio State Medical Association, was a captain in the Medical Corps of the U. S. Army on the staff of the base hospital at Camp Shelby, Hattiesburg, Miss., where the 37th Division, Ohio National Guard, is now in training.

* * *

Dr. John J. Thomas, Cleveland, is chairman of the graduates of the School of Medicine of Western Reserve University participating in the Alumni Council's concentrated effort during the month of March in the continuous fund raising program of the institution.

* * *

The Registry of Medical Technologists of the American Society of Clinical Pathologists has been transferred from Denver, Colorado, to Muncie, Indiana. Dr. Lall G. Montgomery, pathologist at Ball Memorial Hospital, Muncie, is chairman of the Board and Mrs. Anna R. Scott is registrar.

Ohio Faces Heavy Draft Quota in March; More Physicians Called for Active Duty; 700 Questionnaires Still Out

OHIO will be expected to furnish approximately 14,000 draftees during the month of March, according to orders received by General Gilson D. Light, director of State Selective Service. This will be the heaviest call on Ohio in any one month.

The job of furnishing Ohio's February quota of draftees required the appointment of many additional medical examiners to local selective service boards. Appointments were made by State Selective Service Headquarters after obtaining recommendations through the Headquarters Office of the Ohio State Medical Association from committees on medical preparedness of the various county medical societies.

Selective Service Headquarters reports that more and more cities are organizing teams of physicians to conduct physical examinations of registrants. This plan is working out especially well in cities having multiple draft boards and heavy quotas, according to Selective Service Headquarters, which recommends that the "team physician" plan be seriously considered in all communities, especially those having large quotas.

OPENINGS IN MEDICAL RESERVE

According to a communication from Major Frank J. Vokoun, medical corps, in charge of calling medical reserve officers for active service in the Ohio area of the Fifth Corps Area, excellent opportunities are opening up for younger physicians, for example those finishing hospital residencies and internships, in the Medical Reserve Corps.

Major Vokoun states that physicians under 35 years of age, physically fit, of good moral character and agreeing to serve for one year of active duty may apply for a commission in the Medical Reserve Corps. It is suggested by Major Vokoun that such applications be initiated by May 15 by filing at one of the following district offices:

Toledo, 402 U. S. Court and Customs House.
Dayton, 318 Federal Building.
Columbus, 414 Federal Building.
Cleveland, 538 Federal Building.
Cincinnati, 519 U. S. Post Office.
Akron, 549 First Central Tower.

MORE PHYSICIANS CALLED

Ohio's list of medical reserve officers is being rapidly depleted, according to Major Vokoun, so he is very anxious to obtain applicants for commissions in the medical reserve from among physicians of draft age, prior to July 1, 1941. It takes about six weeks for applications to go through official channels.

Since the February issue of *The Ohio State Medical Journal* went to press, the following Ohio physicians have been called into active service:

Carlisle Barracks, Pa., for one month refresher course and subsequently to school listed after each name, to assume duties listed: Lt. Col. Warren Conrad Fargo, Cleveland, Station Hosptal, Ft. Sam Houston, Texas—Executive Officer and Director of Training. Major John Hugh Marshall, Findlay, Letterman General Hospital, San Francisco, California—Director of Surgical Section. Capt. Roland Schuster Jauch, Rocky River, Station Hospital, Ft. Sam Houston, Texas—Assistant Instructor, Medical Section. 1st Lt. Edward Egner Ferguson, Cleveland, Station Hospital, Ft. Sam Houston, Texas—Assistant Instructor, Laboratory Section. Major Thomas A. Peebles, Lorain, Medical Field Service School—Assistant to Director, Department of Training. 1st Lt. Albert E. Rath, Wooster, Station Hospital, Ft. Sam Houston, Texas—Assistant Instructor, Medical Section.

Camp Shelby, Miss.: Capt. Joseph Bernard Edelstein, Toledo; Col. Scott Clark Runnels, Cleveland Heights; 1st Lt. Evan C. Fowler, Sebring; 1st Lt. Walter A. Cunningham, Steubenville; Major Charles Hodge Bailey, East Liverpool.

Ft. Bragg, N. C.: 1st Lt. Norman H. Weinberg, Cincinnati.

Armored Force, Ft. Knox, Ky.: Col. Nicholas A. Albanese, Columbus; Col. Wm. L. Fox, Cleveland; Lt. Col. Myron Hanna, Findlay; Lt. Col. Porter C. Pennington, Findlay; Lt. Col. Franklyn A. Rice, Cleveland; Major Howard C. Eddy, Cleveland; Capt. Harry G. Conn, Toledo.

Camp Wheeler, Macon, Ga.: Lt. Col. Wm. Harris Ambrose, Greenfield; Major James H. Bahrenburg, Canton; Major Clarence Wm. Hullinger, Springfield; Capt. William H. Barnard, Toledo; 1st Lt. Wilfred I. Carney, Youngstown; 1st Lt. John Ward Doering, Logan; Capt. Calvin G. Jackson, Kenton; Major Henry Jerry John, Cleveland; Major Alan DeGrief Knisely, Lima; 1st Lt. Robert Courtney Suttle, Put-in-Bay.

Reception Center, Columbus, Ohio: 1st Lt. Alexander Pollack, Columbus.

Columbus General Depot, Columbus, Ohio: Capt. Donald R. Brumley, Tiffin.

Camp Davis, Wilmington, N. C.: Lt. Col. Ira Arthur Abrahamson, Cincinnati; Lt. Col. Marcellus L. Peterson, Cincinnati; 1st Lt. Thomas M. Edwards, Cincinnati; Lt. Col. Howard E. Harmon, Chillicothe; Major Meyer Fineberg, Cleveland; Major John W. Young, Empire; Capt. Francis C. Curtzwiler, Toledo; 1st Lt. Victor R. Frederick, Urbana; 1st Lt. Samuel D. Goldberg, Youngstown; 1st Lt. Ralph E. Hibbs, Cleveland; 1st Lt. Robert C. Hume, Athens; 1st Lt. Philip B. Giber, Girard; Major John F. Hamsher, St. Paris; Major Milton E. Jones, Columbus; Capt. Robert Daniel Arthur, Springfield; 1st Lt. Charles Lewis Langsam, Macedonia; Major Edward King, Cincinnati.

Camp Grant, Illinois: Capt. Robert E. Bowman, Cleveland.

Corps Area Service Command, Puerto Rico: Major Howard V. Dutrow, Dayton; Major William M. Shapiro, Toledo.

Regular Army: 1st Lt. Bernard L. Pelton, Toledo.

Cleveland Recruiting and Induction Station: 1st Lt. Sylvester C. Missal, Cleveland.

Orders Revoked: Capt. Theodore C. Allenbach, Worthington, ordered to Camp Shelby, Mississippi. 1st Lt. Shepard A. Burroughs, Ashtabula, ordered to Ft. Bragg, N. C.

FINAL CALL FOR QUESTIONNAIRES

The Committee on Medical Preparedness of the Ohio State Medical Association has completed its follow-up campaign among Ohio physicians who prior to January 13 had not filed a Preparedness Questionnaire with the American Medical Association, Chicago, or with the Headquarters Office of the State Medical Association, Columbus.

Up to February 20, questionnaires had not been received at Chicago or Columbus from approximately 700 Ohio physicians out of the approximately 9,338 Ohio physicians, or approximately 8 per cent. Incomplete information will be recorded in the A.M.A. preparedness files on those failing to file a questionnaire. The files will be changed in event questionnaires are received from those who have not filed one to date.

NOW'S THE TIME TO BECOME FELLOW OF THE A.M.A.!

Since the 1941 session of the American Medical Association will be held in Cleveland next June 2-6, every eligible Ohio physician will want to attend as many sessions as possible of that great medical gathering. To be "eligible" to attend, a physician must be a Fellow of the A.M.A. Right now is the time for each physician to take care of this important matter by making formal application for Fellowship by writing directly to the American Medical Association, Chicago. Every member of the American Medical Association (every member of the Ohio State Medical Association) is eligible to apply for Fellowship. Cost of Fellowship is $8.00 per year, the same as the subscription to The Journal of the A.M.A. and when a physician becomes a Fellow he receives The Journal of the A.M.A. free.

OHIO DOCTORS SHOULD APPLY NOW FOR FELLOWSHIP IN THE A.M.A.

Birth-Death Handbooks Available

The State Department of Health has arranged to have copies of "Physicians' Handbook on Birth and Death Registration", made available to members of the medical profession through their local medical societies. On February 15, Dr. R. H. Markwith, State Director of Health, addressed a letter to all local health commissioners requesting them to ascertain from the secretary of their county medical society the number of physicians desirous of having this handbook. Published by the Bureau of the Census, U. S. Department of Commerce, this ninth edition of the handbook contains the international list of causes of death and other valuable information on the subject of vital statistics.

Plans for Assembly Progressing

Many Ohio physicians are planning to be in Columbus, Tuesday, Wednesday and Thursday, April 15, 16 and 17, for the Eighth Annual Post-Collegiate Assembly of the Ohio State University College of Medicine. The program will consist of lectures, roundtable conferences, demonstrations and symposiums. An intensive course in Hematologic Diseases will be given April 14-19, by the Department of Medical Research in conjunction with the American College of Physicians. Dr. Russel G. Means, Columbus, is chairman of the committee which is arranging the program for the Assembly. The complete program will be published in the April issue of *The Ohio State Medical Journal.*

State Association To Cooperate With Ohio N.Y.A. in Health Program; Basic Policy To Govern Project Adopted

COOPERATION with the National Youth Administration of Ohio in a state-wide health program for youth employed by the N.Y.A. was voted by The Council of the Ohio State Medical Association, in session on February 16, 1941 (see Council minutes this issue, page 263), and a statement of policy setting forth the principles and conditions governing such cooperation was adopted.

The statement of policy adopted by Council, containing basic principles prepared primarily for the guidance of county medical societies whose active interest and help in the health program will be solicited by N.Y.A. officials, reads as follows:

TEXT OF STATEMENT

"Pursuant to action of The Council of the Ohio State Medical Association on December 8, 1940, offering the assistance of the Association to the National Youth Administration of Ohio in formulating and initiating a health program for those participating in the N.Y.A. program in this state, and under the authority voted by The Council on that day, the Committee on Public Relations and Economics has held several conferences with officials of the N.Y.A. on this question.

"As a basis for a working agreement between the Ohio State Medical Association and the N.Y.A. in Ohio, the committee presents the following policies and principles for consideration of The Council:

"1. The proposed health program shall be made available only to those who are bona fide participants in the N.Y.A. activities.

"2. Formation and administration of a health program in each county shall be worked out jointly between the N.Y.A. and the county medical society, such program to be adapted to the specific conditions existing in the respective community.

"3. Initial efforts in putting the proposed health program into effect shall involve physical examinations of N.Y.A. youth.

"4. In connection with the physical examination program, efforts should be made to develop a sound program of health education for N.Y.A. youth under the guidance of the county medical society, the State Department of Health and local health departments.

"5. An organized follow-up program involving correction of health defects discovered through the physical examination phase of the program should be deferred, pending further conferences between the N.Y.A. and the Ohio State Medical Association during which basic principles and policies can be developed. However, health defects and deficiencies should be pointed out by physicians to N.Y.A. youth examined and such youth should be encouraged to utilize medical facilities in the community for the purpose of obtaining proper medical attention.

"6. For the guidance of county medical societies in setting up a physical examination program for N.Y.A. youth, the following alternative procedures are suggested, each county determining which procedure or combination of procedures would be feasible in that particular community:

"(a) Designation by the county society of certain physicians who may be willing to conduct the physical examinations and who would be employed by the N.Y.A. for such purpose.

"(b) Organization of teams of physicians by the county medical society for the purpose of conducting the physical examinations.

"7. Reimbursement of physicians who may participate in the physical examination program shall be worked out jointly by the N.Y.A. and the medical society of each county, taking into consideration local conditions, customary fee schedules, and the amount of time and services which would be required.

"8. Inasmuch as the proposed N.Y.A. health program is an emergency project under the National Defense program and experimental in scope, the terms and conditions of any agreement worked out between the N.Y.A. and the county medical society may require periodic revision. Therefore, frequent conferences should be held by representatives of local medical societies and N.Y.A. officials so that modifications of programs under way may be made to meet new and unforeseen conditions and situations. Both the county medical society and the N.Y.A. shall have the right from time to time to recommend changes in such program, subject to mutual agreement before becoming effective.

"9. County medical societies should feel free to consult the Committee on Public Relations and Economics of the State Medical Association for advice on matters of policy and procedure which can not be settled locally.

"10. The Council of the State Medical Association recommends that each county medical society, if possible, cooperate with the N.Y.A. in the proposed physical examination program, keeping in mind that health programs of this character need competent supervision and the guidance of the medical profession."

CONFERENCES HELD

The action of The Council on February 16 was taken after several conferences between the Committee on Public Relations and Economics of the Ohio State Medical Association and representatives of the National Youth Administration of Ohio. At the December, 1940, meeting of The Council the following resolution was adopted by The Council, through which final conferences were authorized, and the Committee on Public Relations and Economics was instructed to represent the State Medical Association in such negotiations:

"Resolved: That The Council appreciates the opportunity afforded by the National Youth Administration of Ohio to confer with officials of that agency on questions pertaining to the establishment and maintenance of a health program for young people participating in the N.Y.A. program in this state. Believing that any health program which may be initiated by the N.Y.A. in Ohio needs competent supervision and the guidance of the medical profession, The Council offers to N.Y.A. officials the assistance of the Ohio State Medical Association in efforts to evolve a health program that will be based on sound principles and practical from an administrative point of view. The Council herewith instructs the Committee on Public Relations and Economics to act as a liaison between the Ohio State Medical Association and the National Youth Administration of Ohio on this matter. Realizing that a program designed to affect all parts of the state must be elastic enough to meet local conditions and situations, The Council feels that any health program established by the N.Y.A. should provide for a reasonable degree of local autonomy, especially with respect to administratve details and procedures, and that such matters should be worked out jointly by the N.Y.A. and the respective county medical societies, after a general policy has been agreed upon by the N.Y.A. and the Ohio State Medical Association."

Late last Fall the National Youth Administration of Ohio selected Mr. M. L. Dawson as State Health Supervisor, placing him in charge of administrative and organization details for the proposed state-wide health program. Mr. Dawson formerly was chairman of the Physical Education Department and a member of the staff of the Student Health Service, Antioch College.

DR. WILZBACH NAMED CONSULTANT

Shortly after the first of the year, Dr. Carl A. Wilzbach, health commissioner of the City of Cincinnati and chairman of the Sub-Committee on Public Health Education of the Ohio State Medical Association, was appointed by the National Youth Administration of Ohio as state health consultant. Dr. Wilzbach will act in an advisory capacity to the N.Y.A. on technical features of the health project. Dr. Wilzbach attended the conferences, previously referred to, at which the policy later adopted by The Council was drafted.

The proposed N.Y.A. health program in Ohio is part of a nation-wide health program being carried on by the N.Y.A. for youth enrolled with that organization. The co-sponsor of the project in Ohio is the State Department of Health and that department under the direction of Dr. R. H. Markwith, director of health, will assist in various details of the program. At the present time there are approximately 25,000 out-of-school Ohio youth enrolled with the N.Y.A., the program of which is designed to prepare young people for jobs in private employment and to make it possible for them to obtain training in various fields through which they can become self-supporting.

To be a part of the N.Y.A. out-of-school program, the youth must be: (1) out of school, (2) unemployed, (3) between the ages of 18 and 25, or high school graduates of 17, (4) citizens of the United States, (5) in need of employment.

OBJECTIVES OF PROGRAM

The objectives of the N.Y.A. health program, as set forth in official statements issued by the N.Y.A., are as follows:

"(a) A physical appraisal, by means of a technically competent health examination, of every youth assigned to the N.Y.A. out-of-school work program.

"(b) Correction of health defects through maximum utilization of community resources, through the use of supplementary medical and dental services provided where possible by the National Youth Administration, and through developing in youth an interest in improving their health by their own personal efforts.

"(c) To give improved technical advice and assistance with respect to all N.Y.A. efforts having a direct and immediate bearing on the health of youth workers, such as nutrition, sanitation, physical development, and recreation."

An appropriation of approximately $120,000 has been allocated to the N.Y.A. of Ohio by the Federal Government to carry on the health program and to provide for the compensation of physicans for the physical examinations and where necessary to assist N.Y.A. youth in obtaining follow-up medical services in event they are unable to provide themselves with such services out of the wages which they receive for employment on N.Y.A. projects, or through existing medical facilities of the community.

As pointed out by N.Y.A. officials, the major purpose of the health examination phase of the program is to facilitate the assignment of youth to the proper types of work; to assist in guidance of individual youth in physical development activities; to discover health conditions that need attention; and to serve as a tool in health education work.

Initial efforts will be directed toward the physical examinations. Other phases of the program will be considered at additional conferences between N.Y.A. officials and representatives of the State Medical Association. Statements made to The Council by representatives of the N.Y.A. revealed that the N.Y.A. not only is seeking but is anxious to have the guidance, advice and cooperation of county medical societies. Every possible effort will be made, according to such officials, to have the health program for N.Y.A. youth in each county meet the desires and suggestions of the county medical society.

Problems of Preparedness and Discussions of Medical Service Plans Feature Conference in Chicago

PROBLEMS of medical preparedness and the establishment of voluntary group medical care plans were topics given greatest consideration at the 15th annual meeting of the National Conference on Medical Service held at the Palmer House, Chicago, Sunday, February 16. Valuable comparison of experiences and study of each other's problems were obtained by the 200 physicians and lay executives of medical organizations in 14 mid-Western states who attended the day-long sessions.

First speaker of the panel on voluntary group medical care programs was Mr. J. D. Laux, Executive Director of Michigan Medical Service, Inc., who told of experiences of the Michigan plan in the first year of its existence. After 12 months of providing medical and surgical service to nearly 120,000 subscribers, he can give an absolutely affirmative answer to the basic question, "Is there a need for a professionally controlled prepayment medical service plan?" Mr. Laux told the conference.

PROFESSIONAL GUIDANCE ESSENTIAL

"No government or lay agency can satisfactorily operate a plan," he asserted, "because questions are constantly arising which demand professional guidance. We have found, too, that the profession will cooperate far better when the plan is professionally controlled."

Mr. Laux said he believes that provision of low-cost prepaid medical service to the low-income group cannot be left to small private groups for two reasons: First, there is a strong tradition in America which opposes the making of profit on systems of taking care of the sick, and, second, a large number of different plans operated by private firms, clubs, health associations, etc., is a strong bid for state medicine because under such conditions of disunity and lack of organization "the public would eventually demand government operation."

MICHIGAN'S EXPERIENCES

Recognizing that the actuarial experience in Michigan has been too brief to set up as a criterion, Mr. Laux said, however, that the plan in that state has thus far proved actuarially and financially sound. He quoted statistics to show how the funds have been dispensed and how future risks and premiums are being computed. Among the 59,000 "surgical only" subscribers the cost of the average case has been $47, and the number of cases per 1,000 subscribers has averaged six per month. Michigan's experience has shown that over half of the appendectomies, tonsillectomies, submucus resections, and other surgical procedures for pre-existing conditions were done in the first six months, thus lightening the surgical load appreciably and permitting allowance for the obstetrical costs which are anticipated in the second year of enrollment.

Mr. Laux said all premiums charged in Michigan were found to be sufficient except that for surgical care of employed females and dependents, which showed a two-cent deficit. That, however, will be adjusted within the next few weeks, he added. Many more subscribers might have been enrolled in Michigan during the first year, Mr. Laux explained, if the directors of the plan had not deliberately proceeded cautiously and conservatively. The majority of the subscribers are earning annual incomes of between $1400 and $2000, he reported, although many with annual incomes of $1200 or less have been enrolled.

DATA ON OTHER STATES

The status of medical service plans in Illinois, where a committee of the State Medical Society is studying plans and enabling acts in other states preliminary to drafting a local program, was reported to the conference by Dr. W. M. Hartman, of Macomb, Ill. A questionnaire submitted to the state's 101 county medical societies indicated that there was a larger majority of the profession who were eager to see some type of plan established in Illinois.

Mr. J. G. Crownhart, Executive Secretary of the Wisconsin State Medical Society, discussed the three different medical service plans which had been set up experimentally in Wisconsin.

Discussing the panel, Dr. Norman Scott, Medical Director of New Jersey Medical Service Administration, Trenton, N. J., announced that offices for that corporation have been opened and that enrollment of subscribers will probably begin shortly. Forty per cent of the New Jersey physicians have already signified their intention to participate, and the required 51 per cent is expected to be obtained in a few weeks, he said.

Dr. Scott and Mr. Laux both expressed the hope that the future will bring some form of coordination and cooperative effort among the various states which are experimenting with medical service plans and suggested that such an organization as the National Conference might become the coordinating agency.

MEDICAL PREPAREDNESS

Significant talks on problems connected with medical preparedness were given by Dr. Morris Fishbein, editor of *The Journal of the American*

Medical Association and member of its Committee on Medical Preparedness, and Col. Leonard Rowntree, Chief of the Medical Division of the Selective Service System.

Dr. Fishbein declared that difficult problems of personnel procurement, many of them far from solution, are facing officials of the A.M.A. and the Army Medical Corps. The requirement of 8,000 physicians on active duty in each of the five years of the proposed training period will "make a considerable hole in the medical profession," he asserted. According to preparedness needs, he said, 3,500 of the 5,200 graduates of medical schools each year should voluntarily enlist, but "this will create a tremendous residency problem!"

Dr. Fishbein averred that thus far the medical profession has failed to obtain from the Federal government the financial and other support it should have in wrestling with the problems of medical preparedness, but expressed the hope that more funds for research in this field would be made available soon.

STATUS OF MEDICAL STUDENTS

Both Col. Rowntree and Dr. Fishbein alluded to the seriousness of the problem relative to the drafting of medical students, and, although the Selective Service Act prohibits blanket deferments, Col. Rowntree gave reason to believe that some means would be found to alleviate this situation. Conferences were to be held in the offices of the A.M.A. on that point during the week following the Chicago meeting, he indicated. Col. Rowntree said also that he would be in conference with officials of the American Dental Association relative to the use of dentists in draft board examinations in an effort to reduce the number of rejected conscriptees for reasons of dental deficiencies.

Discussing the general topic of draft board examinations, Col. Rowntree urged that "more and more use should be made of the advisory boards." This is one means of increasing efficiency, he declared. In answer to a question from the floor he declared that at present there is no appeal from a decision of the induction board, but, "since induction boards are subject to human fallibility like the rest of us," this procedure is also being considered. Records of social welfare and juvenile delinquency agencies should be utilized as a means of uncovering cases of mental and moral unfitness, Col. Rowntree declared.

OTHER SUBJECTS DISCUSSED

Techniques for conducting postgraduate programs under the auspices of state medical societies were discussed in the afternoon session of the conference. Speakers and their topics were: Dr. H. E. Snyder, of Winfield, Kas., "A Rural State's Program;" Dr. W. A. O'Brien, University of Minnesota Medical School, Minneapolis, Minn., "As Carried On in Minnesota; A Cooperative Program;" and Dr. Robert S. Berghoff, Chicago, "The Illinois Program."

Proposed Federal legislation pertaining to health and medical care was discussed by Dr. E. H. Cary, of Dallas, Texas, chairman of the Legislative Committee of the American Medical Association. He implied that so far there is nothing of an alarming nature pending before The Congress and made a plea for continued united action by the physicians of the United States to prevent the enactment of laws which would be detrimental to public welfare and the medical profession.

Mr. J. W. Holloway, Jr., acting director of the Bureau of Legal Medicine of the A.M.A., briefly discussed state legislative problems. He said one of the significant current developments is the concerted attempt of naturopaths and chiropractors in several states as well as in The Congress to obtain passage of laws which would make certificates from their state and national organizations tantamount to licenses to practice.

Speakers on an afternoon panel on "Medical Care for Social Security Clients" were: Mr. Walter F. Finke, director of the Minnesota Division of Social Welfare, St. Paul, Minn.; Dr. Walter W. Adson, chairman of the medical advisory committee to the Minnesota Division of Social Welfare, Rochester, Minn.; Mr. Walter G. Stumbo, formerly attorney for the State Department of Social Welfare, Topeka, Kas.; and Dr. Charles H. Phifer, chairman of the Illinois State Medical Society's advisory committee to the Old Age Assistance Division of the State Department of Welfare, Chicago.

Concluding speaker of the conference was Mr. C. H. Wantz, president of the Medical Exhibitors' Association, Chicago, who discussed "The Annual Meetings from the Standpoint of the Exhibitor."

Ohio delegates to the conference were Dr. D. W. Hogue, of Springfield, Second District Councilor; Dr. Sterling H. Ashmun, of Dayton, member of the Committee on Education; and Mr. Richard A. Aszling, director, Bureau of Public Education, Ohio State Medical Association.

New Neurology Society Organized

The first scientific meeting of the recently-organized Cincinnati Society of Neurology and Psychiatry was held at the University Club, Cincinnati, January 23. The topic discussed was "Infectious Polyneuritis", and the essayist was Dr. Charles D. Aring. Officers of the society are Dr. Thomas A. Ratliff, president; Dr. E. Armitage Baber, vice-president, and Dr. Aring, secretary-treasurer.

New Regulations Pertaining to Submission of Specimens To State Laboratory Drafted to Improve Service

THE number of specimens submitted to the laboratory of the State Department of Health for examination has increased to such proportions that the drafting of certain procedures to insure prompt and accurate service has become necessary. In announcing the new regulations, Dr. R. H. Markwith, State Director of Health, pointed out that 34,194 blood specimens were submitted to the State Laboratory for examination during the month of January, and that two tests, a Kahn and a Kline test, were done on each specimen.

The new procedures, which were issued on January 25, follow:

1. Effective immediately, laboratory tests will only be performed upon specimens that are received in the Ohio Department of Health Laboratory in official containers and tubes that are furnished by the Department of Health for this purpose.
2. Each tube containing a specimen for laboratory examination, and the patient's card, must be placed in the special individual mailing container provided for this purpose.
3. Specimens must be mailed to the laboratory on the same day they are secured from the patient.
4. Multiple laboratory examinations will not be performed upon the specimens of blood submitted in one tube. If more than one test is desired, a separate container, tube and patient's card must be submitted for each test.
5. The information requested on the patient's card must be furnished in complete detail, legibly written, and the card signed by the attending physician. The patient's name must appear on the card, initials and numbers will not be accepted.
6. It is understood when the attending physician signs a laboratory request card, that it is in compliance with the resolutions that have been adopted by the House of Delegates of the American Medical Association and the Ohio State Medical Association, which provides that laboratory tests performed by the Department of Health Laboratory will be restricted to requests made by the physicians whose patients find it difficult or impossible to pay the cost of the laboratory service in the customary manner.
7. Official containers and tubes for submitting specimens to the Ohio Department of Health Laboratory may be secured from the local health commissioner.
8. Paper labels, wax, or adhesive tape should not be placed on the test tubes.

Dr. Markwith also announced that the Ohio Public Health Council at a meeting in Columbus, January 19, amended the Ohio Sanitary Code, making more stringent regulations pertaining to the sanitation of camps and regulations for the supervision of milk supply in State Park sanitary districts. Copies of these regulations can be obtained by addressing the State Department of Health, Columbus.

Dr. Cecil Striker Is Honored

Dr. Cecil Striker, Cincinnati, has been named president of the American Diabetes Association, Inc., which was organized recently. Among the objectives of the Association are: to disseminate among physicians information relative to the diagnosis and treatment of diabetes by means of meetings, bulletins, publications of papers in scientific journals, and to educate the laity in the early recognition of diabetes and in the realization of the importance of medical supervision. Dr. Elliott P. Joslin, Boston, is honorary president of the Association. Other officers include: Dr. William Muhlberg, Cincinnati, treasurer; and Dr. Henry John, Cleveland, and Dr. Louis B. Owens, Cincinnati, members of the Board of Trustees. Helen Revel, 1019 Provident Bank Bldg., Cincinnati, is acting executive secretary. The Association plans to have a one-day meeting during the week of June 2-6, when the American Medical Association meets in Cleveland.

Award for Best Paper Offered

The Ohio Alpha Chapter of Alpha Epsilon Delta, national honorary pre-medical fraternity, has established a $50 prize contest to stimulate original work and creative writing among premedical students at Ohio State University. Dr. Hugh E. Setterfield, chapter adviser and professor of anatomy at the College of Medicine, is chairman of the awards committee and announced the establishment of the award. Half of the prize is being provided by Dr. Leslie L. Bigelow, professor of surgery, in the College of Medicine. The prize will be awarded at the June commencement for the best paper on any phase of study or research in the College of Arts and Sciences in its relation to preparation for the study of medicine.

A.M.A. SESSION • CLEVELAND

JUNE 2-6, 1941

HOTEL RESERVATIONS

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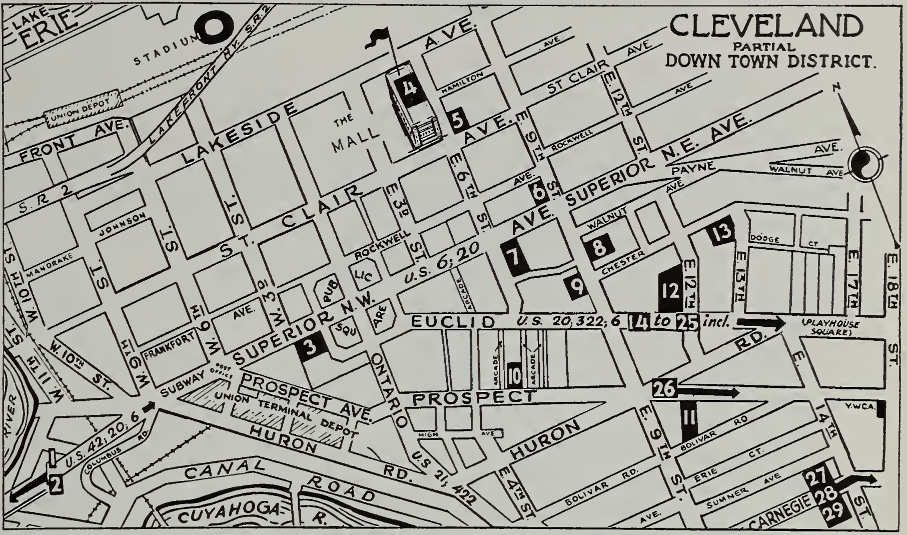

SCHEDULE OF RATES (ALL RATES ARE FOR ROOMS WITH BATH)

Number on Map	HOTELS	SINGLES	DOUBLES	TWIN BEDS	SUITES
29	ALCAZAR, Surrey at Derbyshire Rd.	$3.00	$5.00	$5.00	$10.00-$15.00
13	ALLERTON, Chester at E. 13th St.	2.50- 3.00	4.25- 4.50		10.00
5	AUDITORIUM HOTEL, St. Clair at E. 6th St.	2.00- 4.00	4.00- 5.50	5.00- 7.00	
17	BELMONT, 3844 Euclid Ave.	1.75- 3.50	3.00- 5.00	4.00- 6.00	8.00- 10.00
27	BOLTON SQUARE, Carnegie at E. 89th St.	2.50- 3.00	3.50- 4.00	4.00- 5.00	8.00- 12.00
11	CARTER, Prospect at E. 9th St.	2.75- 5.00	4.00- 7.00	5.00- 9.00	12.00
3	CLEVELAND, Public Square	3.00- 6.00	4.50- 6.50	6.00- 10.00	21.00- 30.00
4	CLEVELAND PUBLIC AUDITORIUM, Lakeside & E. 6th St.				
10	COLONIAL, Prospect at E. 6th St.	2.50- 4.00	4.00- 6.00	5.00- 7.00	
20	DEVON HALL, 1588 Ansel Rd.	2.00- 3.00	3.00	3.00	
25	DOANBROOKE, 1924 E. 105th St.	2.50	4.00	4.50	
21	FENWAY HALL, Euclid at E. 107th St.	3.00- 5.00	4.50- 7.50	5.00- 10.00	6.50- 12.00
15	FERN HALL, 3250 Euclid Ave.	1.50- 2.50	2.50- 3.00	4.00- 5.00	
8	GILLSY, 1811 E. 9th St.	2.00- 4.00	3.00- 5.00	4.00- 8.00	
7	HOLLENDEN, Superior at E. 6th St.	3.00- 8.00	4.50- 10.00	5.00- 12.00	12.00- 16.00
1	LAKE SHORE, 12506 Edgewater Dr.	3.50	6.00	6.00- 8.00	8.00- 12.00
9	MILNER, 1862 E. 9th St.	1.50- 2.50	2.00	2.00	
14	NEW AMSTERDAM, Euclid at E. 22nd St.	2.00- 3.50	3.50- 4.50	4.50- 6.00	
6	OLMSTED, Superior at E. 9th St.	2.00- 4.00	3.50- 5.00	5.00- 6.00	20.00
22	PARK LANE VILLA, 10510 Park Lake	3.00	4.00- 5.00	6.00	10.00
17	QUAD HALL—(Men Only), 7500 Euclid Ave.	2.50		4.00	
19	ST. REGIS, Euclid at E. 82nd St.	2.00- 3.50	3.00- 4.50	3.50- 4.50	
23	SOVEREIGN, E. Blvd. & E. 105th St.	3.00- 4.00	5.00- 6.00	6.00- 7.00	10.00
12	STATLER, Euclid at E. 12th St.	3.00- 6.00	4.50- 8.00	5.00- 8.00	10.00- 23.00 (2-4 persons)
26	STERLING, Prospect at E. 30th St.	2.00- 3.50	3.00- 5.00	4.00- 6.00	8.00- 10.00
16	STOCKBRIDGE, 3328 Euclid Ave.	2.00	3.00	4.00	
28	TUDOR-ARMS, 10660 Carnegie Ave.	3.00- 6.00		6.00- 10.00	
24	WADE PARK MANOR, Park Lane at E. 107th St.	3.00- 4.00	7.00- 10.00	5.00- 6.00	10.00- 16.00
2	WESTLAKE, Blount Rd., Rocky River	2.50- 3.00	4.00- 5.00	6.00	12.00

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Proposed Amendments to Constitution and By-Laws of Woman's Auxiliary To Be Voted on in June

AT a meeting of The Council of the Ohio State Medical Association on February 16, 1941, proposed amendments to the Constitution and By-Laws of the Woman's Auxiliary to the Ohio State Medical Association were approved by The Council, such action being required under the Constitution and By-Laws of the Auxiliary. The proposed amendments were prepared by officers of the Auxiliary to clarify certain provisions of the Constitution and By-Laws and to facilitate administration.

The proposed amendments are published herewith in *The Journal* as required by the Constitution and By-Laws and will be voted upon by the House of Delegates of the Woman's Auxiliary when it meets in Cleveland the week of June 2 during the Annual Meeting of the Ohio State Medical Association and the Annual Session of the American Medical Association. Comments regarding each proposed amendment are printed in italics.

Proposed Amendment No. 1. Substitute the following for the present Article 3 of the Constitution:

ARTICLE 3

Component Auxiliaries

A woman's auxiliary in any county, which has been organized with the approval, in writing, of the component medical society of the Ohio State Medical Association in that county, shall be deemed a component auxiliary of this Auxiliary upon approval of its constitution and by-laws and its form of organization by the Board of Directors of this Auxiliary. There shall be only one component auxiliary in each county.

Eliminates reference to "charter", there being some doubt as to whether the Auxiliary being an unincorporated body has a legal rght to issue a charter.

* * *

Proposed Amendment No. 2. In the sixth line of Section 2, Chapter 1 of the By-Laws relating to "membership", strike out the word "chartered" and insert in place of that word the word "component".

Eliminates the word "chartered" to make section conform to Article 3 if amended as proposed above.

* * *

Proposed Amendment No. 3. Strike out Section 1 of Chapter 2 of the By-Laws and insert the following substitute Section 1:

Section 1. **Organization.** To be a component auxiliary of this Auxiliary, a county auxiliary must have the approval, in writing, of the component medical society of the Ohio State Medical Association of that county; must be organized in a manner satisfactory to the Board of Directors of this Auxiliary; and must have a constitution and by-laws which is in conformity with this Constitution and By-Laws and which has been approved by the Board.

Eliminates the word "charters" to make section conform to previous proposed amendments and establishes a procedure for official recognition of county auxiliaries without necessitating the issuance of charters.

* * *

Proposed Amendment No. 4. In Chapter 5, Section 1 of the By-Laws in lines 5 and 6, place a period after the word "filled" and strike out the words "except that of President-Elect".

In the same section in lines 8 and 9 strike out the words "Nominations for the office of President-Elect shall be made from the floor and". In lines 9 and 10 capitalize the word "Nothing". In line 11 strike out the word "other" before the word "offices" and insert in lieu thereof the word "all".

Amended section would provide that the Nominating Committee may offer names for office of President-Elect as well as for other offices to be filled. Retains provision that nominations may be made from the floor for all offices to be filled.

* * *

Proposed Amendment No. 5. In Chapter 6, Section 7 of the By-Laws, strike out the subtitle "Directors" and insert in place of that word the words "Board of Directors".

In the same section strike out in line 2 the words "Executive Board" and insert the words "Board of Directors". In line 3 strike out the word "which" and insert the words "and such Board".

Clarifying amendments, showing that the section refers to the "Board of Directors" not to the directors as individuals.

* * *

Proposed Amendment No. 6. In Chapter 7, Section 1 of the By-Laws in lines 8, 9 and 10, strike out the words "The Chairman of each of the committees enumerated shall be a member of the Board of Directors".

Clarifying amendments, giving the President the power, with approval of the Board, to name as chairman of a standing committee any member of the Auxiliary instead of confining her appointments of chairmen to members of the Board of Directors.

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Excellent Program Arranged for Northern Tri-State Medical Meeting at Tiffin on April 8

An excellent program has been arranged for the Sixty-Eighth Annual Meeting of the Northern Tri-State Medical Association which will be held in Tiffin, Tuesday, April 8. Composed of physicians in Indiana, Michigan and Ohio, the association was organized in 1873. The officers are: Dr. Burt Hibbard, Lima, president; Dr. Lyman T. Rawles, Ft. Wayne, Indiana, vice-president; Dr. E. B. Gillette, Toledo, secretary; Dr. Douglas Donald, Detroit, treasurer, and the following counsellors: Dr. O. P. Klotz, Findlay; Dr. H. C. Weisenbarger, Lima; Dr. H. E. Randall, Flint, Mich.; Dr. Wilfred Houghey, Battle Creek, Mich.; Dr. F. C. Carter, South Bend, Indiana, and Dr. G. O. Larson, LaPorte, Indiana. The program follows:

MORNING SESSION

8:30—Registration.

9:00—Dr. Frederick F. Yonkman, professor of pharmacology and therapeutics, Wayne University College of Medicine, Detroit, "Emergency Drugs".

9:45—Dr. Carl D. Camp, professor of neurology, University of Michigan Medical School, Ann Arbor, "The Neurological Examination and What It Shows".

10:30—Dr. A. D. Ruedemann, chief of eye department, Cleveland Clinic, Cleveland, "The Eye in General Medicine".

11:15—Dr. E. Perry McCullagh, chief of Section of Endocrinology and Metabolism, Cleveland Clinic, Cleveland, "Recent Advances in Endocrinology".

AFTERNOON SESSION

1:15—Dr. Roy W. Scott, professor of clinical medicine, Western Reserve University School of Medicine, Cleveland, "The Bedside Diagnosis of Certain Cardio-Vascular Diseases".

2:00—Dr. George M. Curtis, professor of research surgery, Ohio State University College of Medicine, Columbus, "Recent Developments in Thoracic Surgery".

2:45—Business meeting.

3:00—Dr. W. D. Gatch, Dean and professor of surgery, Indiana University School of Medicine, Indianapolis, "Abdominal Pain".

3:45—Dr. William N. Wishard, Jr., instructor in the department of genito-urinary surgery, Indiana University School of Medicine, Indianapolis, "Urinary Antiseptics from the Viewpoint of General Practice".

EVENING SESSION

6:00—Banquet.

8:15—Dr. Elliott P. Joslin, emeritus professor of clinical medicine, Harvard University Medical School, and medical director of the Geo. F. Baker Clinic, New England Deaconess Hospital, Boston, "The Application of Recent Physiological Studies of the Treatment of Diabetes Mellitus".

All meetings will be held at the Tiffin Theatre, opposite the Shawhan Hotel. The banquet will be held at the Shawhan Hotel. Registration fee is $2.00, and banquet tickets will cost $1.50. The wives of visiting physicians will be entertained during the sessions by the Woman's Auxiliary to the Seneca County Medical Society.

Recent Marriages

Recent marriages of Ohio physicians include the following: Miss Leoneda Marzocchi, Pittsburgh, Pa., and Dr. N. G. Amato, Cincinnati; Miss Eletha Armstrong and Dr. Hubert D. Clapp, Cleveland; Miss Rhea Walter and Dr. William B. Harris, Columbus; Miss Mary Annette Stevens, Niles, and Dr. F. A. Potter, Toledo; Miss Katherine Beard, Somerset, and Dr. Warren A. Lapp, Norwood; Miss Frances Dembovitz, Cleveland, and Dr. F. F. Schwartz, Painesville.

Awarded Phillips Medal

The John Phillips Memorial Medal for 1941 has been awarded by the American College of Physicians to Dr. William Christopher Stadie, associate professor of research medicine, University of Pennsylvania School of Medicine, for his significant contributions to the knowledge of anoxia, cyanosis and the physical chemistry of hemoglobin, and more especially for his recent studies on the subject of fat metabolism in diabetes mellitus.

Dr. Robert L. Faulkner, Cleveland, assistant professor of gynecology, Western Reserve University School of Medicine, was one of the guest speakers at the Ninth Annual Midwinter Postgraduate Clinics of the Colorado State Medical Society, February 5-7, at Denver. He spoke on "Problems of the Menopause".

ADVANCES IN CANNING TECHNOLOGY

III. Modern Heat Processes for Canned Foods

● "This new method of preserving . . . proceeds from the simple principle of applying heat . . . in a due degree to the several substances after having deprived them as much as possible of all contact with the external air."(1)

In this concise manner, Nicholas Appert, discoverer of canning, summed up the salient features of his procedure. Appert's method consisted of sealing prepared foods in wide mouth glass bottles with corks and processing the sealed bottles in a bath of boiling water. The first English edition of his book (1) describes Appert's procedures for some fifty products. While the times of his heat processes varied between products, the temperatures of the processes were uniformly that of boiling water.

After the spread of commercial canning to America, early canners soon found that spoilage frequently resulted when Appert's heat processes were employed. Increasing the time of process at 212°F. alleviated but did not entirely control this difficulty. As recently described (2a), attempts were next made to increase the temperature of process, either by the addition of soluble salts to raise the boiling point of water, or by the use of the autoclave which permitted processing under steam pressure at temperatures above 212°F. About 1874, an improved type of autoclave was invented in the United States and gradually came into general use for certain types of products. While this device reduced spoilage considerably, losses still occasionally resulted due to inadequate heat processing.

Between 1895 and 1900, the new-born science of bacteriology was first applied to the canning industry. These early discoveries are well described elsewhere (2, 3); important among the findings was the fact that for products most favorable for growth of spoilage organisms, there is a minimum time of process which must be applied at a given temperature for a given can size, if preservation of the food is to be assured. The need for standardization of heat processes was thus clearly indicated.

During the past twenty years, the heat processing of canned foods has truly been placed on a sound scientific basis (4, 2b). The natural acidity of the food now determines the process temperature to be used. Foods with pH values below 4.5 may be safely processed at 212°F. or below; the "non-acid" foods with pH values above 4.5 require elevated process temperatures, 240°F. being the temperature most widely employed.

Today, adequate heat processes for non-acid foods are mathematically calculated using data which take into consideration all factors influencing the sterilizing value of a process. Processes thus calculated are thoroughly tested before being incorporated into bulletins of recommended processes which modern canners follow (5).

This establishment of adequate heat processes—particularly for the non-acid foods—is one of the greatest advances in canning technology made in the history of the industry. Today, it is apparent that the success of many of Appert's heat processes was due to fortuitous circumstances. The modern consumer, however, has the assurance that commercially canned foods are among the most wholesome foods reaching his table.

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REFERENCES

(1) 1811. Art of Preserving, N. Appert. Black, Parry and Kingsbury, London.

(2a) 1938. C. O. Ball. Food Research, *3*, 13.

(2b) 1923. C. O. Ball. National Research Council, Bulletin No. 37.

1928. C. O. Ball. Univ. of Calif. Publications in Public Health *1*, 15.

(3) 1937. Appertizing, A. W. Bitting. The Trade Pressroom, San Francisco.

(4) 1920. NationalCannersAssoc.,Bulletin16-L.

(5) 1939. NationalCannersAssoc.,Bulletin26-L, Fourth Edition.

We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned-foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the sixty-ninth in a series which summarizes, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.

The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

In Memoriam

Walter S. Bennett, Elizabeth, Colorado; Denver and Gross College of Medicine, 1909; aged 57; member of the Colorado State Medical Society and the American Medical Association; former member of the Ohio State Medical Association; died January 31. Dr. Bennett practiced in Cardington until the spring of 1920, when he moved to Colorado. His widow, two sisters and a brother survive.

George Orman Berry, M.D., Lancaster; Miami Medical College, Cincinnati, 1891; aged 72; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 25. A native of Lancaster and member of a pioneer Fairfield County family, Dr. Berry practiced there for 50 years. He was a former president of the Fairfield County Medical Society, and a leader in the movement which led to the construction of the Lancaster City Hospital in 1916. His widow and a daughter survive.

John Dudley Dunham, M.D., Columbus; Ohio Medical University, Columbus, 1897; aged 68; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Physicians; member of the American Gastro-Enterological Association; died January 28. A member of the staffs of Mt. Carmel, White Cross and Grant Hospitals, Dr. Dunham practiced in Columbus for 43 years. In 1915 he was president of the Columbus Academy of Medicine. He had been a member of the faculty of Ohio State University College of Medicine, and was a member of the City Board of Health. Dr. Dunham was the first Columbus physician to limit his practice to diagnosis and internal medicine, a step which he took in 1901. He was a former chief-of-staff at Grant Hospital. Dr. Dunham was a charter member of Franklin Post No. 1, American Legion; a lieutenant-colonel in the Medical Reserve Corps of the U. S. Army and a member of the Buckeye Republican Club. His widow and a daughter survive.

Robert Palmer Fulton, M.D., Cleveland; Western Reserve University School of Medicine, 1935; aged 31; member of the Ohio State Medical Association and the American Medical Association; died January 30. Dr. Fulton was on the staff of Babies' and Children's Hospital of the Cleveland University Hospitals, and on the teaching staff of Frances Payne Bolton School of Nursing of Western Reserve University. His widow, his parents, a sister and two brothers survive.

Benjamin P. Hall, M.D., Richwood; Starling Medical College, Columbus, 1882; aged 86; former member of the Ohio State Medical Association and the American Medical Association; died January 27. Dr. Hall practiced in Richwood for nearly 60 years. His widow survives.

Robert Houser, M.D., Cleveland; Cleveland-Pulte Medical College, 1913; aged 55; died January 6. A native of Switzerland, Dr. Houser practiced in Cleveland for 27 years. He was a former president of the Cleveland Homeopathic Society. Surviving are his widow and two sons.

Charles Holmes Kraner, M.D., Pickerington; Starling Medical College, Columbus, 1905; aged 65; died February 6. Dr. Kraner practiced medicine for a few years at Congo, Perry County. For the past 25 years he had operated a general store at Pickerington. Faulty hearing forced him to discontinue the practice of medicine. He was a licensed pharmacist and also an attorney. Dr. Kraner was a member of the Masonic Order. A sister and two brothers survive.

Samuel Tilden Marshall, M.D., Dover; Starling Medical College, 1903; aged 65; member of the Ohio State Medical Association and the American Medical Association; died January 28. Dr. Marshall had practiced in Dover since 1919, and was previously located in Coshocton and Beach City. He was a charter member and former president of the Dover Kiwanis Club; a member of the Methodist Church and the Masonic Order. Surviving are his widow, a daughter, a son, two brothers and three sisters.

Jonathan Finley Mathews, M.D., Houston, Texas; Starling Medical College, Columbus, 1898; aged 74; member of the Texas State Medical Society and the American Medical Association; died January 19. Dr. Mathews practiced in Lima until 1918 when he moved to Texas. Two daughters and a brother survive.

Fayette J. Morton, M.D., Cleveland; Long Island College of Medicine, Brooklyn, N. Y., 1881; aged 89; former member of the Ohio State Medical Association and the American Medical Association; died January 16. Dr. Morton was believed to be the oldest alumnus of Hiram College, where he was graduated in 1877. He retired about ten years ago, after being in active practice on the West Side of Cleveland for over 50 years. He was an active member of the First Congregational Church. His widow and a daughter survive.

Robert George Noble, M.D., Columbus; Starling Medical College, 1907; aged 61; former member of the Ohio State Medical Association and the

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American Medical Association; died January 28. Dr. Noble retired from active practice several years ago because of poor health. During the World War he was attached to base hospital at Camp Sherman, Chillicothe, where he was a captain in the Medical Corps of the U. S. Army. He was a member of the Nu Sigma Nu fraternity. His widow, three sisters and three brothers survive.

John Jacob Reynolds, M.D., Defiance; Detroit Medical College, 1879; aged 87; former member of the Ohio State Medical Association and the American Medical Association; died January 30. Although not actively engaged in practice for the past five years, Dr. Reynolds had been a Defiance County physician for 61 years. He founded the first hospital in Defiance and was a former president of the Defiance County Medical Society. Dr. Reynolds was a member of the Knights of Pythias. A son, two sisters and a brother survive.

Clara Sparks Robertson, West Elkton; Cincinnati College of Medicine and Surgery, 1887; aged 87; died January 15. Dr. Robertson retired ten years ago after having practiced in Preble County for 43 years. A son survives.

John O. Scheel, M. D., Hamilton; Medical College of Ohio, Cincinnati, 1891; aged 84; died February 6. Dr. Scheel retired in 1936, after having practiced in Hamilton for 45 years. He was a member of the Knights of Columbus and the Catholic Order of Foresters. His widow, a daughter and two brothers survive.

William Howard Sharp, M.D., Woodstock; Starling Medical College, Columbus, 1904; aged 64; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 30. Dr. Sharp practiced in Woodstock for 36 years. He was also active in community affairs, being president of the Champaign county board of health, member of the American Legion, and the Masonic Order. During the World War he served in the Medical Corps of the U. S. Army. His widow survives.

Joseph Smith, M.D., Toledo; Toledo Medical College, 1898; aged 82; died January 15. Dr. Smith retired eight years ago. He had formerly practiced in Mt. Vernon. His widow survives.

Alois John Willke, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1892; aged 76; died January 27. Dr. Willke retired in 1922 after having practiced in Maria Stein, Mercer County, for 30 years. Surviving are five daughters and three sons—Dr. G. T. Willke and Dr. A. H. Willke, Cincinnati, and Dr. E. J. Willke, Maria Stein.

Representatives of State Association Take Part in Health Discussion at Ohio Defense Conference

Community health was one of the 10 topics emphasized at the Ohio Valley and Great Lakes Conference on Education, the Community, and Defense, which was held at the Neil House, Columbus, February 13, 14, and 15. In one of the sectional meetings on "strengthening community institutions for defense and post emergencies", eight members of a panel discussed ways in which the respective groups which they represented might work together to preserve community health gains during the present national emergency and afterwards.

Dr. Carl Wilzbach, Cincinnati health commissioner and chairman of the Sub-Committee on Public Health Education of the Ohio State Medical Association, was chairman of the panel. Other discussants and the questions which they answered were:

Dr. George F. Moench, Delaware health commissioner, "What are the modern community techniques that give America the best health record in the world?"

Dr. Russel G. Means, Columbus, "How does the practicing physician contribute to an improved system of community health defense?"

N. H. Danner, D.D.S., Cleveland, "How does the practicing dentist contribute to an improved system of community health defense?"

Delbert Oberteuffer, Ph.D., Columbus, professor of physical education at Ohio State University, "What is the schools' responsibility to the health of their students?"

Dr. Bruno Gebhardt, director, Cleveland Health Museum, "What is the value of public health education by visual methods?"

John L. Hall, assistant director, Columbus Council of Social Agencies, "How can the social worker join forces with the doctor, dentist, and health officer to alleviate health problems of the community's needy?"

Clyde Moore, Columbus newspaper writer, "Where does the citizen come in?"

Among the exhibits at the conference was a booth arranged by the Bureau of Public Education of the State Medical Association. Its central display portrayed graphically the different ways in which the medical profession of Ohio assists in public health education, while large photographic murals on either side told about the purpose of House Bill 51, the proposed enabling act for medical service plans now before the Ohio General Assembly, and the work of the Ohio State Medical Association in assisting in the national defense program through state and county medical preparedness committees. Pamphlets describing House Bill 51 were also distributed from the booth.

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Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

BUTLER

A meeting of the Butler County Medical Society was held at the Middletown Hospital, Thursday evening, January 23. After the transaction of business, the following symposium on "Medical Highlights of 1940", was presented by members of the society: "Medicine", Dr. Walter H. Roehll, Middletown; "Dermatology", Dr. Louis E. Valker, Hamilton; "Eye, Ear, Nose and Throat", Dr. Malcolm Bronson, Hamilton; "Obstetrics", Dr. Corliss R. Keller, Hamilton; "Pediatrics," Dr. Frank C. O'Neill, Middletown; "Surgery", Dr. Harry M. E. Lowell, Hamilton. A buffet luncheon was enjoyed after adjournment.

Dr. Thomas P. Sharkey, Dayton, member of the Committee on Medical Preparedness of the Ohio State Medical Association, spoke on "Medical Defense", at a meeting of the society, Thursday evening, February 27, at Mercy Hospital, Hamilton.—Mabel E. Gardner, M.D., secretary.

CLINTON

Officers of the Clinton County Medical Society for 1941 are: Dr. William L. Wead, Sabina, president; Dr. Chas. W. Matthews, New Vienna, vice-president; Dr. James E. Rose, Sabina, secretary-treasurer; Dr. Frank A. Peelle, Wilmington, chairman, legislative committee; Dr. Robert Conard, Wilmington, delegate; Dr. Elizabeth R. Shrieves, Wilmington, alternate.—James E. Rose, M.D., secretary.

HAMILTON

The Academy of Medicine of Cincinnati presented the following program during February:

February 4—"The Diagnosis and Treatment of Lip and Intra-Oral Lesions", Dr. Frank E. Adair, executive officer, Memorial Hospital, New York City.

February 11—Hospital Night. Case Reports by members of the staff of Bethesda Hospital. "Inversion of the Uterus", Dr. Stanley T. Garber; "Xanthoma of the Knee", Dr. Theodore H. Vinke; "Monocytic Leukemia", Dr. Oscar Berghausen; "Uterine Pathology", Dr. Charles E. Hauser; "Tuberculous Keratitis", Dr. Charles A. Hofling.

February 18—"Progress in the Control of Respiratory Disease", Dr. Charles Fremont McKhann, professor of pediatrics and communicable diseases, University of Michigan Medical School, Ann Arbor.

February 25—"The Significance and Treatment of Pulmonary Hemorrhage", Dr. Porter P. Vinson, professor of bronchoscopy, esophagoscopy and gastroscopy, Medical College of Virginia, Richmond, Va.—Bulletin.

Dr. Parke G. Smith, chairman of the Committee on Medical Service Plans of the Ohio State Medical Association, spoke on "The Problem of Medical Care", at a meeting of the Woman's Auxiliary, Monday afternoon, February 10.—News clipping.

WARREN

Officers of the Warren County Medical Society for 1941 are: Dr. James H. Arnold, Lebanon, president; Dr. Roy C. A. Bock, Kings Mills, vice-president; Dr. A. D. Harvey, Lebanon, secretary; Dr. Alfred A. Stout, Waynesville, treasurer; Dr. Jean A. Nock, Franklin, legislative committeeman; Dr. Paul W. Tetrick, Mason, public relations committeeman; Dr. N. A. Hamilton, Franklin, delegate; Dr. O. W. Hoffman, Franklin, alternate.—A. D. Harvey, M.D., secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CHAMPAIGN

Dr. L. A. Woodburn, Urbana, has been appointed secretary of the Champaign County Medical Society, succeeding Dr. V. R. Frederick, who is now on active duty as a lieutenant in the Medical Corps of the U. S. Army at Camp Davis, N. C.—Alpha F. Hawk, M.D., president.

GREENE

A motion picture, "Human Fertility and Methods in Control of Conception", was presented at a meeting of the Greene County Medical Society, Thursday, February 6, at Xenia.—Donald F. Kyle, M.D., secretary.

MIAMI

At a meeting of the Miami County Medical Society, Friday, February 7, at the Stouder Hospital, Troy, two motion pictures, "Joint Debridement", and "Surgical Treatment of Varicose Veins", were shown through the courtesy of the Davis & Geck Co.; and Dr. John T. Quirk, Piqua, spoke on "Some Observations on the Effects of Cigarette Smoking on the Heart".—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

Dr. Bruce K. Wiseman, professor of medicine and associate director of medical research, Ohio State University College of Medicine, Columbus, spoke on "Developments in the Differentiation and Treatment of the Anemias", at a meeting

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of the Montgomery County Medical Society, Friday evening, February 7, at Dayton.

A symposium on anesthesia was presented by Dr. R. F. Corwin, Dr. J. D. Spaid and Dr. P. L. Yordy, at a meeting of the society, February 21. They discussed: "Obstetrical Anesthesia", "Spinal Anesthesia", and "Anesthetic Complications".—Mildred E. Jeffrey, executive secretary.

SHELBY

The following Sidney physicians are officers of the Shelby County Medical Society for 1941: Dr. Frank S. Downey, president; Dr. Russell L. Wiessinger, vice-president; Dr. L. C. Pepper, secretary-treasurer and legislative committeeman; Dr. R. W. Alvis, delegate; Dr. H. E. Crimm, alternate.—L. C. Pepper, M.D., secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

ALLEN

Dr. Claire L. Straith, Detroit, spoke on various phases of plastic surgery at a meeting of the Lima and Allen County Academy of Medicine, Tuesday evening, January 21, at Memorial Hospital, Lima.—News clipping.

The following Lima physicians are officers of the Academy for 1941: Dr. Paul J. Stueber, president; Dr. J. E. Talbott, vice-president; Dr. R. L. Tecklenberg, secretary; Dr. T. T. Sidener, treasurer; Dr. J. B. Poling, chairman, legislative committee, and public relations committee: Dr. Lester C. Thomas, chairman, medical economics committee; Dr. J. R. Tillotson, delegate; Dr. Wm. Virgil Parent, alternate.—Paul J. Stueber, M.D., president.

AUGLAIZE

Dr. Edward P. Gillette, Toledo, spoke on "Management of Common Fractures", at a meeting of the Auglaize County Medical Society, in the Commissioners' Room, Court House, Wapakoneta, Thursday evening, February 6.—Chas. C. Berlin, M.D., secretary.

CRAWFORD

Dr. Frederick M. Douglass, Toledo, was guest speaker at a meeting of the Crawford County Medical Society, Monday evening, February 3, at Bucyrus. He discussed the management of diseases of the biliary tract, with presentation of four case histories of perforation of the gall bladder.—J. W. Arnold, M.D., secretary.

Mrs. D. D. Bibler was hostess at a luncheon meeting of the Woman's Auxiliary to the Crawford County Medical Society, Tuesday, February 4, at the Greenlawn, Bucyrus. The guest speaker, Lucy Ailer, spoke on "The Health of Children as Related to Community Health".—News clipping.

HANCOCK

Members of the Hancock County Medical Society gave a farewell dinner in honor of Dr. Lawrence H. Goodman, Findlay, Tuesday evening, January 14, at the Findlay Country Club. Dr. Goodman subsequently left for Camp Jackson, S. C., to enter service as a captain in the Medical Corps of the U. S. Army. Dr. R. E. Razor, Bloomdale, president of the society, was toastmaster at the dinner and Dr. J. M. Firmin, Findlay, presented Dr. Goodman with a traveling bag, a gift from his colleagues.—News clipping.

HARDIN

Officers of the Hardin County Medical Society for 1941 are: Dr. H. E. Gibson, Kenton, president; Dr. F. M. Elliott, Ada, vice-president; Dr. H. A. Kerns, Kenton, secretary-treasurer; Dr. Elliott, legislative committeeman; Dr. N. C. Schroeder, Kenton, public relations committeeman; Dr. John A. Mooney, Kenton, medical economics committeeman; Dr. Don R. Printz, Ada, delegate; Dr. W. P. Rickert, Kenton, alternate.—H. A. Kerns, M.D., secretary.

MARION

Thirty members of the Marion Academy of Medicine heard a talk on "Effects of Allergy on the Constitution", by Dr. J. A. Rudolph, Co-

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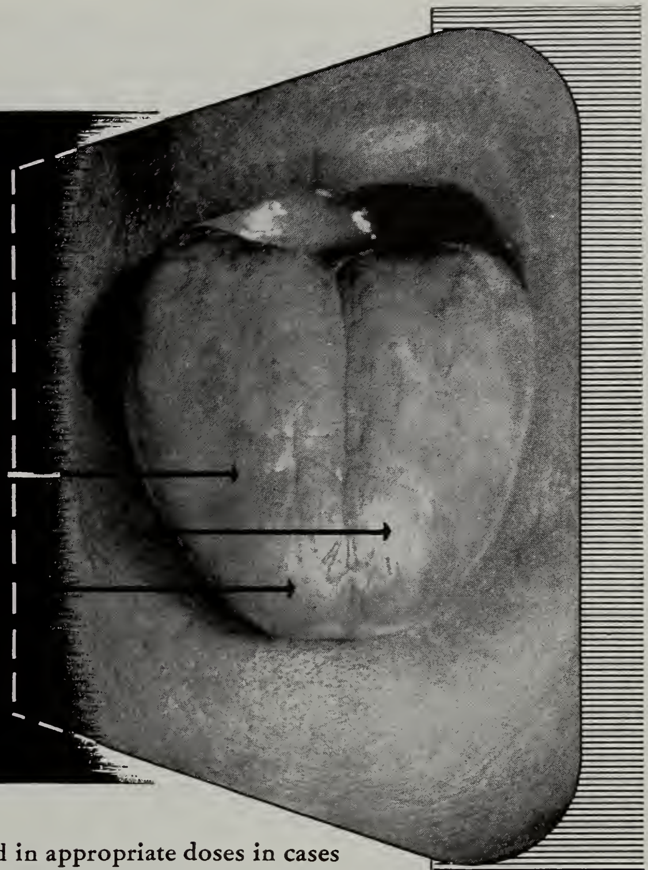

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Pellagra, however, is frequently accompanied by evidences of deficiencies of other factors of the vitamin B complex, such as polyneuritis (a manifestation of vitamin B_1 deficiency). In the diets of such patients it may be necessary to insure the presence of foods rich in the vitamin B complex, or to administer—concurrently with the nicotinic acid—thiamine hydrochloride, riboflavin, and, in some instances, pyridoxine hydrochloride.

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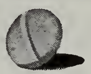

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lumbus, at a meeting in the Marion City Hospital, Tuesday night, February 4. Dr. Thomas H. Sutherland discussed the proposed Enabling Act for medical service plans.—News clipping.

SENECA

Lederle Laboratories presented a film and lecture on "Pneumonia Therapy", by Dr. Schmidt, Chicago, at a meeting of the Seneca County Medical Society, Thursday evening, February 6, at Mercy Hospital, Tiffin. There were 15 members present.—N. E. Williard, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

DEFIANCE

Mrs. D. J. Slosser, Defiance, is president of the Woman's Auxiliary to the Defiance County Medical Society, which held its initial meeting Thursday, January 23, at the Kettenring Golf Club, Defiance. Other officers are: Mrs. Seth E. DeMuth, Hicksville, vice-president, and Mrs. G. E. Winn, Defiance, secretary-treasurer.—News clipping.

HENRY

Dr. Evan G. Galbraith, Toledo, spoke on "Sinus Diseases and Their Treatment", at a meeting of the Henry County Medical Society, Tuesday, February 11, at Napoleon.—G. M. Wright, M.D., president.

LUCAS

Officers of the Academy of Medicine of Toledo and Lucas County for 1941 are: Dr. E. W. Huffer, president; Dr. A. P. Hancuff, president-elect; Dr. F. P. Osgood, secretary; Dr. W. W. Alderdyce, treasurer; Dr. A. A. Brindley, chairman, legislative committee; Dr. D. M. Stewart, chairman, public relations committee; Dr. F. N. Nagel, chairman, medical economics committee; Dr. A. A. Brindley, Dr. E. G. Galbraith, Dr. R. C. Young and Dr. F. N. Nagel, delegates; Dr. K. D. Figley, Dr. L. D. Miller, Dr. C. E. Hufford and Dr. H. M. Scott, alternates.—F. P. Osgood, M.D., secretary.

The Academy presented the following programs during January and February:

January 3—Annual Banquet Meeting. "American Medicine Prepares", Dr. Morris Fishbein, Editor, *The Journal of the American Medical Association.*

January 10—Section of Pathology, Experimental Medicine and Bacteriology, "Newer Methods of Differential Diagnosis of the Acute Abdomen", Dr. B. Steinberg and Dr. M. E. Goodrich.

January 17—Medical Section. "The Evolution and Management of Chronic Asthma", Dr. Karl D. Figley.

January 24—Surgical Section, "Congenital Abnormalities", Dr. Thomas L. Doyle, Philadelphia, Pa.

January 31—Eye, Ear, Nose and Throat Section. "Some Aspects of Allergy", Dr. French K. Hansel, St. Louis, Mo.

February 14—"Methods of Treating Cancer of Skin, Lip and Tongue", Dr. W. H. Meffley and Dr. W. S. Peck.

February 21—Medical Section. "Leukemia", Dr. Russell L. Haden, Cleveland.

February 28—"A Review of the Modern Treatment of Burns", Dr. O. W. Burkholder.—Bulletin.

PUTNAM

Colonel Edward D. Sinks, Medical Reserve Corps, U. S. Army, Lima, was the guest speaker at a meeting of the Putnam County Medical Society, Tuesday, February 4, at Ottawa. Col. Sinks returned recently from Washington where he conferred with the Surgeon-General of the Army and with ranking officials of other government services.

A former officer in the Regular Army, the Colonel gave a most informative address covering the present medico-military situation. He said that the sudden expansion of our armed forces will create a shortage of civilian physicians, which may well create a popular demand for a lowering of educational standards, possibly a shortening of the course in medical schools to three years. He urged alertness on the part of all physicians, and pointed out that the postwar period may be made more difficult by large numbers of alien physicians. Col. Sinks stated that a most aggressive attitude is necessary on the part of the medical profession if we are to avoid the unhappy fate of physicians in the totalitarian states.—H. N. Trumbull, M.D., correspondent for *The Journal.*

WILLIAMS

Officers of the Williams County Medical Society for 1941 are: Dr. G. E. Cheadle, Bryan, president; Dr. Thos. L. Taylor, Montpelier, secretary-treasurer; Dr. H. J. Luxan, Montpelier, legislative committeeman; Dr. H. W. Wertz, Montpelier, delegate; Dr. H. R. Mayberry, Bryan, alternate.—Thos. L. Taylor, M.D., secretary.

WOOD

Dr. Leonard Nippe, Toledo, spoke on "Foreign Bodies in the Bronchi and Esophagus", at a dinner meeting of the Wood County Medical Society, Thursday, January 16, at the Woman's Club, Bowling Green. After a discussion of the anatomy of the region, illustrated with blackboard drawings, Dr. Nippe took up the methods of extracting the various articles that may find their way into the larynx, bronchial tubes or

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GYNECOLOGY—Two Weeks Intensive Course starting April 7th and June 16th. Clinical, Diagnostic and Didactic Course every week.

OBSTETRICS—Two Weeks Intensive Course starting April 21st. Three Weeks Personal Course starting May 26th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course starting April 7th. Informal and Personal Courses every week.

OPHTHALMOLOGY—Two Weeks Intensive Course starting April 21st. Informal Course every week.

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esophagus. A formidable array of instruments that go to make up the armamentrium of the bronchoscopist was presented and many of the patterns explained and demonstrated. Also a large collection of foreign bodies ranging from fishbones to cockle shells previously removed by Dr. Nippe was shown, together with the X-rays of the various items as they appeared in the body before operation. Many questions were painstakingly answered by the essayist at the close of the lecture. A rising vote of thanks was given Dr. Nippe in appreciation of his interesting discussion.—D. R. Barr, M.D., correspondent for *The Journal.*

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

ASHTABULA

Twenty-two members attended a meeting of the Ashtabula County Medical Society, Tuesday night, January 14, at the Hotel Ashtabula, Ashtabula. Theodore Warren spoke on the legal aspects of medicine.—News clipping.

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during February:

February 7—Clinical and Pathological Section. "Carcinoma of Pharynx, with Extension to Frontal Lobe", Dr. W. H. Tuckerman; "Demonstration of Dilitation Treatment of Cardiospasm", Dr. Wm. A. Read; "Case Demonstration—Carcinoma of the Stomach", Dr. R. S. McGinnis; "Acute Interstitial Nephritis—Presentation of Two Cases", Dr. C. T. Way.

February 12—Practice of Medicine Section. "Radiation Therapy of Common Infections", Dr. Robert P. Meader; "Critical Evaluation of Sensitivity Tests with Horse Serum in Relation to Serum Sickness", Dr. John A. Toomey and Dr. W. P. Garver; "Barbiturate Poisoning—Picrotoxin Therapy", Dr. J. P. Anderson.

February 14—Joint Meeting, Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "Selective Vulnerability of the Brain as Exemplified by Carbon Monoxide Poisoning", Dr. E. A. Scharrer; "The Technique of Preparing Serum for Emergency Transfusions", J. W. Mull, Ph.D.; "Clinical Use of Stored Serum in Maternity Hospital", Dr. J. S. Fish; "Problems Involved in Organizing a Plasma Bank", Dr. F. C. Sutton.

February 19—Joint Meeting, Industrial and Orthopedic Section and Regional Fracture Committee, American College of Surgeons. Afternoon session—Fracture Clinic at Mt. Sinai Hospital. Evening Session—"Conservative Treatment of Compound Fractures", Dr. Walter G. Stern; "Fractures of the Head of the Radius", Dr. Walter A. Hoy, Akron.

February 21—"Dangers of Crowd-Mindedness, a Psychiatric Prospective of World Chaos", Dr. Edward S. Strecker, professor of psychiatry, University of Pennsylvania School of Medicine.

February 24—Military Medicine Section. "Current Progress of the Military Mobilization Plan", Col. John C. Darby, Med. Res., U. S. Army; "Medical Problems of the Caribbean Area in Relation to National Defense", Dr. George Saunders.

The Woman's Auxiliary to the Academy, which has now more than 300 members, held a meeting in the Allen Memorial Medical Library, Tuesday, February 11. Dr. M. Paul Motto, chairman of the Academy's advisory committee to the auxiliary, discussed some of the activities of the health education committee, and Dr. John E. Rauschkolb explained current aspects of medical economics. Officers of the auxiliary are: Mrs. C. T. Way, honorary president; Mrs. F. C. Oldenburg, president; Mrs. A. T. Bunts, vice-president, and Mrs. C. G. LaRocco, secretary-treasurer.—News clipping.

LAKE

Officers of the Lake County Medical Society for 1941 are: Dr. Howard Stephens, Mentor, president; Dr. Mel A. Davis, Painesville, vice-president; Dr. James G. Powell, Painesville, secretary-treasurer; Dr. Benjamin S. Park, Painesville, legislative committeeman; Dr. V. N. Marsh, Painesville, delegate.—James G. Powell, M.D., secretary.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

MAHONING

Dr. F. Dennette Adams, Massachusetts General Hospital, Boston, spoke on "Some Clinical Consideration of Chronic Headache", at a meeting of the Mahoning County Medical Society, Tuesday evening, February 18, at the Youngstown Club.—Bulletin.

Officers of the recently-organized Woman's Auxiliary are: Mrs. R. M. Morrison, president; Mrs. John Heberding, vice-president; Mrs. John Noll, secretary, and Mrs. John J. McDonough, treasurer.—News clipping.

PORTAGE

At a meeting of the Portage County Medical Society, Thursday evening, February 6, at the home of Dr. Emily J. Widdecombe, Kent, the guest speaker was Dr. T. L. Parry, Akron, who discussed the significance of eye ground findings

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph. Gon. & Ven. Dis., 23, 201 (March) 1939.

*Silver Picrate, is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

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in relation to physical examinations.—E. J. Widdecombe, M.D., secretary.

STARK

Dr. Donald R. McKay, assistant professor of medicine, University of Buffalo School of Medicine, Buffalo, N. Y., spoke on "Diagnosis and Treatment of Respiratory Diseases", at a meeting of the Stark County Medical Society, Thursday evening, February 20, at the Elks' Club, Canton. In the afternoon Dr. McKay gave a radio address on "Respiratory Diseases", over the Canton radio station, WHBC.—Clair B. King, M.D., secretary.

Sixty members of the Woman's Auxiliary attended a meeting at the home of Mrs. Winfred M. Dowlin, Canton, Tuesday evening, January 14. Stunt night was observed and the program was directed by Mrs. R. L. Clunk and Mrs. Fred Hise.—News clipping.

SUMMIT

Officers of the Summit County Medical Society for 1941 are: Dr. Leroy C. Eberhard, president; Dr. James G. Kramer, president-elect; Dr. A. S. McCormick, secretary; Dr. O. P. Allen, treasurer; Dr. Robert T. Allison, Dr. Harvey H. Musser and Dr. Carl R. Steinke, delegates; Dr. R. E. Pinkerton, Dr. E. A. Freeman and Dr. H. V. Sharp, alternates.—A. S. McCormick, M.D., secretary.

Dr. W. W. G. MacLachlan, professor of medicine, University of Pittsburgh School of Medicine, spoke on "Some Clinical Observations on Pneumonia and Some Remarks on Treatment with Quinine Derivative Hydroxyethylapocupreine".—Bulletin.

TRUMBULL

Dr. Wm. M. Skipp, Youngstown, President of the Ohio State Medical Association, was the guest speaker at a meeting of the Woman's Auxiliary to the Trumbull County Medical Society, Tuesday, February 4, at the Mahoning Country Club, Warren.—News clipping.

Seventh District

(COUNCILOR: CARL GOEHRING, M.D., STEUBENVILLE)

BELMONT

Members of the Belmont County Medical Society met at the home of the secretary, Dr. C. W. Kirkland, Bellaire, Thursday evening, February 20. Dr. Donald S. Benson, Moundsville, W. Va., spoke on "Asphyxiation and Resuscitation", and a film on "Oxygen Therapy", produced by the Linde Air Products Company, was shown.—C. W. Kirkland, M.D., secretary.

A meeting of the Woman's Auxiliary was held at the home of Mrs. C. W. Kirkland, Bellaire, Thursday, February 13.—News clipping.

COLUMBIANA

Dr. Stewart N. Rowe, Pittsburgh, Pa., spoke on "Low Back and Sciatic Pain," at a meeting of the Columbiana County Medical Society, Tuesday night, February 11, at the American Legion Hall, Lisbon.—News clipping.

COSHOCTON

The following Coshocton physicians have been elected officers of the Coshocton County Medical Society for 1941: Dr. G. A. Foster, president; Dr. H. F. Wherley, vice-president; Dr. W. F. Lyons, secretary-treasurer; Dr. E. M. Wright, legislative committeeman; Dr. J. G. Smailes, delegate; Dr. A. P. Magness, alternate.—W. F. Lyons, M.D., secretary.

HARRISON

Officers of the Harrison County Medical Society for 1941 are: Dr. G. E. Vorhies, Scio, president; Dr. D. C. Pettay, Cadiz, vice-president; Dr. F. Foster Dye, Cadiz, secretary-treasurer;

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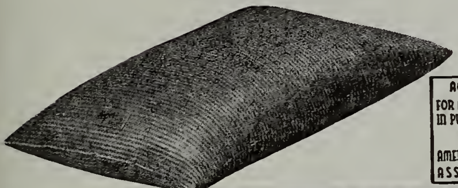

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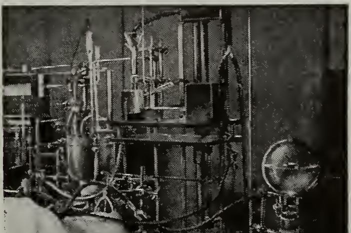

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Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

FAIRFIELD

Dr. W. R. Coleman, Lancaster, who has practiced medicine in Fairfield County for 43 years, was guest of honor at a meeting of the Fairfield County Medical Society, Thursday night, February 6, at Lancaster.—News clipping.

GUERNSEY

Dr. Harry E. LeFever and Dr. Roy J. Secrest, Columbus, spoke on "Ruptured Nucleus Pulposis", and "Hypertrophy of the Ligamentum Flavum", at a meeting of the Guernsey County Medical Society, Thursday, February 6, at the Hotel Berwick, Cambridge.—M. J. Thomas, M.D., secretary.

LICKING

The motion picture, "When Bobby Goes to School", sponsored by the American Academy of Pediatrics, was shown at a meeting of the Licking County Medical Society, Tuesday night, January 28, at Hull Place, Newark.—News clipping.

MUSKINGUM

A symposium on "Influenza" was presented at a meeting of the Muskingum County Academy of Medicine, Thursday evening, February 6, at Zanesville. Dr. J. S. Bain, New Concord, spoke on "Bacteriology of Influenza". The subject of Dr. R. S. Martin's paper was "Ear, Nose and Throat Complications of Influenza". Dr. Stanford S. Daw discussed "Pulmonary Complications", and Dr. H. T. Glaser spoke on "Some Other Post-Influenza Complications". Drs. O. I. Dusthimer, Edmund R. Brush and R. B. Bainter told of their experiences during the influenza epidemic of 1918-1920.—News clipping.

Ninth District

(COUNCILOR. I. P. SEILER, M.D., PIKETON)

SCIOTO

Dr. Lawrence N. Atlas, Cleveland, spoke on "Conservative and Surgical Treatment of Arterial Disease of the Extremities", at a meeting of the Hempstead Academy of Medicine, Monday

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The swaddled infant pictured at right is one of the famous works in terra cotta exquisitely modeled by the fifteenth century Italian sculptor, Andrea della Robbia. In that day infants were bandaged from birth to preserve the symmetry of their bodies, but still the gibbous spine and distorted limbs of severe rickets often made their appearance.

A bambino from the Foundling Hospital, Florence, Italy,—A. della Robbia

Glisson, writing in 1671, described an ingenious use of swaddling bands — "first crossing the Brest and coming under the Armpits, then about the Head and under the Chin and then receiving the hands by two handles, so that it is a pleasure to see the Child hanging pendulous in the Air . . . This kind of Excercise . . . helpeth to restore the crooked Bones. . . ."

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SWADDLING was practised down through the centuries, from Biblical times to Glisson's day, in the vain hope that it would prevent the deformities of rickets. Even in sunny Italy swaddling was a prevailing custom, recommended by that early pediatrician, Soranus of Ephesus, who discoursed on "Why the Majority of Roman Children are Distorted."

"This is observed to happen more in the neighborhood of Rome than in other places," he wrote. "If no one oversees the infant's movements, his limbs do in the generality of cases become twisted. . . . Hence, when he first begins to sit he must be propped by swathings of bandages. . . ." Hundreds of years later swaddling was still prevalent in Italy, as attested by the sculptures of the della Robbias and their contemporaries. For infants who were strong Glisson suggested placing "Leaden Shooes" on their feet and suspending them with swaddling bands in mid-air.

How amazed the ancients would have been to know that bones can be helped to grow straight simply by internal administration of a few drops of Oleum Percomorphum. What to them would have been a miracle has become a commonplace of science. Because it can be administered in drop dosage, Oleum Percomorphum is especially suitable for young and premature infants, who are most susceptible to rickets. Its vitamins derived from natural sources, this product is rich in vitamins A and D. Important also to your patients, Oleum Percomorphum is an economical antiricketic.

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evening, February 10, at the Portsmouth General Hospital.—Sol Asch, M.D., secretary.

Tenth District

(COUNCILOR. C. C. SHERBURNE, M.D., COLUMBUS)

FAYETTE

Officers of the Fayette County Medical Society for 1941 are: Dr. Orlyn L. Wiseman, Jeffersonville, president; Dr. M. N. Reiff, Washington C. H., vice-president; Dr. James F. Wilson, Washington C. H., secretary-treasurer; Dr. James M. Harsha, Washington C. H., public relations committeeman; Dr. Wiseman, legislative committeeman; Dr. Reiff, medical economics committeeman; Dr. Wilson, delegate; Dr. James E. Thompson, Washington C. H., alternate.—James F. Wilson, M.D., secretary.

FRANKLIN

The following programs were presented by the Columbus Academy of Medicine during February:

February 3—"Diagnosis and Treatment of Sterility in Women", Dr. Charles W. Pavey, assistant professor of obstetrics, Ohio State University College of Medicine.

February 17—"Injuries to the Heart", Dr. R. W. Kissane, lecturer in cardiology, Ohio State University College of Medicine.

February 24—Section in General Medicine. "Allergy for the General Practitioner", Dr. J. A. Rudolph.—Bulletin.

KNOX

Officers of the Knox County Medical Society for 1941 are: Dr. Julius Shamansky, Mt. Vernon, president; Dr. J. O. Crist, Centerburg, vice-president; Dr. John C. Drake, Mt. Vernon, secretary-treasurer; Dr. James F. Lee, Mt. Vernon, legislative committeeman; Dr. F. C. Anderson, Mt. Vernon, delegate; Dr. Lee, alternate.—John C. Drake, M.D., secretary.

MADISON

Dr. C. C. Sherburne, Columbus, Councilor for the Tenth District of the Ohio State Medical Association, was guest speaker at a meeting of the Madison County Medical Society, Thursday noon, January 30, at the Country Club, London.—News clipping.

Officers of the society for 1941 are: Dr. Herman E. Karrer, Plain City, president; Dr. H. D. Wright, West Jefferson, secretary; Dr. W. A. Holman, London, legislative committeeman; Dr. J. A. Knapp and Dr. W. M. McShane, London, public relations committeemen; Dr. J. W. Hurt, medical economics committeeman; Dr. Karrer, delegate; Dr. Wright, alternate.—H. D. Wright, M.D., secretary.

PICKAWAY

The following Circleville physicians have been named officers of the Pickaway County Medical

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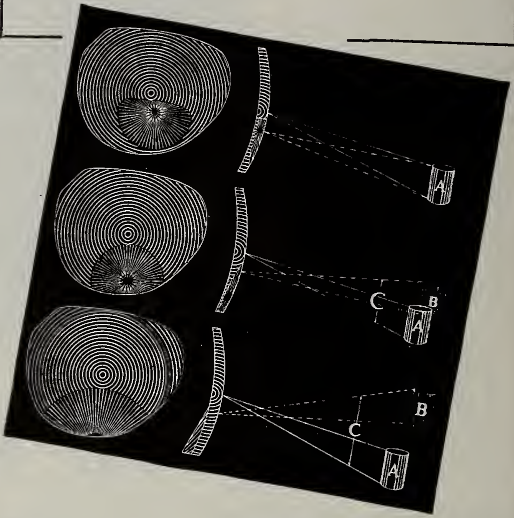

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Society for 1941: Dr. D. V. Courtright, president; Dr. E. S. Shane, vice-president; Dr. B. N. Coers, secretary-treasurer; Dr. A. D. Blackburn, delegate; Dr. V. D. Kerns, alternate.—B. N. Coers, M.D., secretary.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

ASHLAND

Officers of the Ashland County Medical Society for 1941 are: Dr. Paul E. Kellogg, Ashland, president; Dr. Robert P. Bogniard, Ashland, vice-president; Dr. L. Harold Martin, Ashland, secretary-treasurer; Dr. H. M. Gunn, Ashland, chairman, legislative committee; Dr. W. F. Emery, Ashland, chairman, public relations committee; Dr. George M. Emery, Ashland, chairman, medical economics committee.—L. Harold Martin, M.D., secretary.

ERIE

Dr. Frank C. Clifford, Toledo, spoke on "The Management and Treatment of Heart Disease", at the first of a series of inter-county medical meetings sponsored by the Erie County Medical Society, Wednesday, February 12, at the Hotel Rieger, Sandusky.—News clipping.

LORAIN

The Lorain County Medical Society and the newly formed Woman's Auxiliary to the society held a joint meeting February 11 at the Lorain Country Club. After the turkey dinner at 5 P.M. the members of both organizations were addressed by Dr. Wm. M. Skipp, Youngstown, President of the Ohio State Medical Association. The first part of Dr. Skipp's address concerned the desirability of having an active woman's auxiliary in each county. Dr. Skipp then spoke at length on the proposed Enabling Act which is before the State Legislature. After this part of the program the ladies then adjourned to another part of the building where they considered the constitution for the new organization. There was a total attendance of 70 physicians and their wives at the joint meeting.—L. H. Trufant, M.D., secretary.

RICHLAND

A panel discussion on "The Treatment of Pneumonia" was presented by Drs. D. C. Lavender, P. M. A. Bein and F. J. Heringhaus at a meeting of the Richland County Medical Society, Thursday, February 20, at the Mansfield General Hospital. This was followed by a showing of the Lederle film on "Pneumonia".

Officers of the society for 1941 are the following Mansfield physicians: Dr. Charles L. Shafer, president; Dr. Howard B. Peck, vice-president; Dr. George L. Evans, secretary-treasurer; Dr. Charles R. Keller, Dr. W. W. Pierce and Dr. W. E. Wygant, legislative committeemen; Dr. Carl R. Damron, public relations committeeman; Dr. John S. Hattery, delegate; Dr. Hugh Winbigler, alternate.—Geo. L. Evans, M.D., secretary.

The following is a report of the activities of the Woman's Auxiliary to the Richland County Medical Society:

This auxiliary has been organized two years, has a membership of 46, and holds meetings once a month. In 1939 the auxiliary undertook the mail sale of tuberculosis seals in Richland County. At that time the contributors numbered about 3,000. Each year has shown an increase and the 1940 sale is now being closed with 11,000 contributors, exceeding the goal set by the county headquarters by $1000. This project is in addition to some effort spent in distributing *Hygeia* in the county.—Mrs. L. C. Nigh, chairman, publicity committee.

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If physicians seeking new opportunities or desiring to change locations will file their names with that office, an effort will be made to furnish them with suggestions and at the same time render a service to members seeking assistants, etc.

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The Physician's Bookshelf

"**Noble Fellow**"—William Starling Sullivant, by Andrew D. Rodgers, III, ($3.50. *G. P. Putnam's Sons, New York)* tells the story of one of Ohio's great scientists. William Starling Sullivant was also a successful business man of Columbus and on the first Board of Trustees of Starling Medical College. His great grandson has told this story in a most interesting manner so that while it is carefully documented, still it is as good reading as well-written fiction. To us, our old friends, Lynn Starling, Dr. Goforth, Asa Gray, Professor Wamsley, Dr. John Edmiston, Lesquereus, come and go through its pages, making it a book which every one interested in Ohio medical history must have in his library.

Dog-Team Doctor, The Story of Dr. Romig, by Eva Greenslit Anderson, Ph.D. ($2.75. *The Caxton Printers, Caldwell, Idaho)* is the story of Dr. Joseph Herman Romig who faced the perils and hardships of the frozen north to practice his profession. After a lifetime of service to the sick of Alaska, he is usually conceded to be the most widely known inhabitant of the territory. A tale that is more exciting than fiction—a real inspiration of pioneer sacrifice.

Gould's Pocket Pronouncing Medical Dictionary. ($2.00. Eleventh edition, Thumb Index. *P. Blakiston's & Son Company, Philadelphia)* provides intelligible definitions and the proper pronunciation of many thousands of medical terms.

Synopsis of Obstetrics, by J. C. Litzenberg, M.D. *(C. V. Mosby Company, St. Louis;* $4.50), presents the essentials only as is required of a good synopsis. This type of book is always interesting to read because it is a real test of the author's judgment. Professor Litzenberg passes such a test in this book.

Frontier Doctor, by Urling C. Coe, M.D. *(Macmillan Company, New York;* $2.50), is the biography of the author. He arrived in Farewell Bend, Oregon, some 36 years ago which at that time was a wide open, booming town. Dr. Coe tells with understanding, sympathy and humor, the story of his frontier practice from Indians to prostitutes with no nurse or hospital nearer than 150 miles.

Modern Marriage. Edited by Moses Jung *(F. S. Crofts Company, New York;* $3.75), is a frank and complete discussion of the major aspects of marriage with emphasis on the ethical and aesthetic implications of the marriage relationship. The book has grown out of the course on the subject offered for the last six years at the State University of Iowa, and is therefore a cooperative effort of the various departments of that great University. It is a book

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[1] Sevringhaus, E. L., and Evans, J. S.: *Am. J. M. Sc.* 178:638, Nov. 1929.

[2] Novak, Emil: *Surg. Gynec. & Obst.* 70:124, Jan. 1940.

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to be recommended for the purpose for which it is intended.

As The Twig Is Bent, by Leslie B. Hohman, M.D. *(Macmillan Company, New York,* 1940; $2.50), is another book of advice to parents concerning the education of their children. Few writers on the subject have both the investigative as well as the practical experience of the author who is a practicing psychiatrist associated with the Johns Hopkins School of Medicine. The book is an exposition by a judicial mind of what is intelligent in terms of actual life.

Tomorrow's Children. Proceedings of the Southern Conference on Tomorrow's Children, held at Atlanta on November 9, 10 and 11, 1939 *(Birth Control Federation of America, 501 Madison Ave., New York City;* 75 cents), is a book which should be read by every Doctor of Medicine who is not myopic in his social vision. Even he might be cured by it. It is a symposium by authoritative persons on what the citizens of the South in the next generation or two have confronting them. These are the things which will determine the fate of our people—malnutrition, wasted lands, ignorance, physical deterioration with its accompanying mental deficiency. Get the book, read it, apply much of it to Ohio. Wake up! Forget about the "birth control" part. Get busy in the fundamental conservation of our food supply.

Essentials of the Diagnostic Examination, by John B. Youmans, M.D. *(The Commonwealth Fund, New York City;* $3.00), is a manual on the subject designed to assemble in one small volume the minimum of diagnostic methods needed in general practice. A well designed text judiciously executed.

Graduate Medical Education. Report of the Commission on Graduate Medical Education *(University of Chicago Press)* should stimulate greater interest in the whole field of graduate medical education so that there will be improved educational content of the internships and residencies resulting in a better trained profession with a keener desire to keep abreast of the times.

American Journal of Mental Deficiency, continuing the Journal of Psychoasthenics and the Proceedings of the American Association on Mental Deficiency. $4.00 per volume issued quarterly. Publication office, 372 Broadway, Albany, N.Y. Should reach all persons interested in the mentally defective and the subcultural.

Management of the Cardiac Patient, by William G. Leaman, Jr., M.D. ($6.50. *Lippincott, Philadelphia)* is a most successful attempt to place in the hands of the physician in general practice

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The Injured Back and Its Treatment, edited by John D. Ellis, M.D. ($3.50. *C. C. Thomas, Springfield, Ill.)* is a series of nine papers written by various authors representing divergent points of view in an attempt to lay the groundwork of a textbook when our progress in this field reaches the stage when it will allow of standardization.

The Virus, Life's Enemy, by Kenneth M. Smith, F.R.S. ($2.00. *Macmillan, New York)* is the account of the discovery and pursuit of these minute bodies which cause such widespread death, deformity, and loss by disease in man, animals, and plants.

Essentials of Nutrition, by Henry C. Sherman and Caroline Sherman Lanford ($3.50. *Macmillian, New York)* offers a thoroughly adequate and up-to-date view of the essentials of nutrition. Since the approach is largely through the relations of food to health and efficiency it is a book which every physician should read.

A Surgeon Explains to the Layman, by M. Benmosché, M.D. ($3.00. *Simon and Schuster, New York)* is an attempt to give laymen an understanding of surgery—how it works and what it does. Surely it should do much to create a better appreciation of its services when they are needed.

The Mother's Manual for Family Control (25c. *Health Calendar, Cleveland, Ohio)* is essentially a manual to accompany each Fertility Calendar. Both of these to be dispensed by the physician. All this reminds your reviewer of an evaluation given by a friend who is also an obstretician, i.e. an excellent attempt to be given to those who will not care too much if it fails.

Productivity, Wages, and National Income *(Brookings Institution, Washington, D. C.)* is the digest of a study of the subject made by Surgeon Bell. Strange this analysis suggests a thing which we have always believed, that the distribution of savings from increased productivity to the consumers in the form of lower prices may be more desirable than their distribution directly either to employed labor or to capital. All of this it seems to me does have a lot to do with the health of our nation.

The Nursing Care of Patients with Infantile Paralysis, by Jesse L. Stevenson, R.N., consultant in Orthopedic Nursing *(The National Foundation for Infantile Paralysis, 120 Broadway, New York City)* is a complete little manual for all who are concerned with the nursing care after an epidemic.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 April, 1941 No. 4

JONATHAN FORMAN, M.D., *Editor*

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Medicine in World Crisis

CHARLES A. DOAN, B.S., M.D., F.A.C.P., COLUMBUS, OHIO

ON occasions such as this, it has become traditional for the disciples of scientific medicine to gather together from laboratory and hospital ward, and, with interested lay friends, for a brief passing moment to take inventory,—to gain a fresh perspective in time and space,—of our relationships to each other, to our immediate objectives, and to the world in which we find ourselves. It is probable that this ritual, more often than not, plays a purely perfunctory role in the lives of the participants, serving on the one hand to complement superficially the successful apprenticeship of the members of a graduating class, and on the other, to excite reflexly the complacent pride of a satisfied faculty. But, surely, if there is any excuse for us,—here,—today—to waste valuable time in talk, while elsewhere in almost every corner of the earth intelligence appears to be fighting a losing battle in the effort to make itself heard above the noise of marching feet and bursting bombs, the words must not consist merely of platitudinous congratulations or trite pleasantries. Rather must they reflect, whether we will it or not, that searching reappraisal of life's fundamental values, which recent events have forced upon every thinking individual. Subtle, noxious elements threaten our confidence in, and weaken even our desire for the continued peaceful pursuit of knowledge. Indeed, the very survival of every fundamental democratic ideal is being ruthlessly challenged. In the very midst of this catastrophic planetary crisis, let us see, if we may, today's implication of man's physical relationship to his universe.

The Author

● Dr. Doan, Columbus, Ohio, is a graduate of Johns Hopkins University School of Medicine, 1923; Fellow American College of Physicians; member American Association of Anatomists, American Society for Experimental Pathology, American Society for Clinical Investigation, Society for Experimental Biology and Medicine; professor of medicine, chairman department of medicine, and director Medical Research, Ohio State University College of Medicine.

The biological enigma, which you and I have chosen to try and understand in some measure, is at one and the same time the most fascinating and the most complex problem posed by Fate for the mind of man to tackle. Biology is a jealous mistress, demanding undivided allegiance and requiring unswerving devotion before yielding up any of her many secrets. The Biologic Sciences flourish, as do the Fine Arts, only when Nature and circumstances combine, propitiously to release the mind of man from the more immediate, primitive, economic and political conflicts of less stabilized, less favorable eras. What then of your career and of mine in the world today?

To maintain even some semblance of philosophic optimism, and to give meaning and some hope of ultimate significance to the daily routine of our professional and personal lives in such times as the present, it would seem essential to view these recent tragic months in the long perspective of history, and to strike a long-time

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Commencement address delivered before the Albany Medical College graduating class, June 10, 1940, Albany, N. Y.

balance for current orientation, remembering that tyranny is old in the world, and the democratic ideal and Christian ethics comparatively new. Heredity and race, society and cultures, represent not alone contemporary ontogenetic factors, but historic,—phylogenetic,—as well. We must turn the spotlight of research on the past to better illumine the present, and in so doing, mayhap we shall feel a bit better, or at least less hopeless about our own too obvious frailties and threatened social collapse.

EARLY RECORD OF DISEASE

Disease has existed on the earth as long as organic life has been known. The archeologist, the geologist, the anthropologist, have all contributed affirmative evidence of this belief. The earliest interpretable record dates back some four and a half million years according to the accepted geological calculation of time, and represents a form of parasitism—fossil snails in the act of feeding on crinoids (a species of sea lily),—the first example of the stronger mobile unit attacking and destroying a relatively static vegetative colony of cells. From that time on, as the fossil remains of the earth's earliest inhabitants unfold the story of life before the advent of man, there appears mute evidence of disease, and conflict, as revealed by skeletal abnormalities—fractures, carious teeth, bone necroses—in the now extinct fishes and reptiles.

Man's arrival on the scene seems to have been greeted by the same onslaught of disease that met the various forms of plant and animal life which preceded him. The "Java man", placed by anthropologists as the precursor of the human race with an estimated age of 500,000 years, shows pathological exostoses of the femur. The "Piltdown man", with an estimated age of 100,000 years and considered the oldest human skeleton yet discovered, has an acromegalic skull. The "Neanderthal man", spanning 75,000 years of elapsed time, has suggested rickets to some anthropologists.

BEGINNINGS OF MEDICINE

The history and beginnings of medicine extend back to the ancient Egyptians of the very first civilization of which we have written record, some thirty centuries before the rise of the better known Hippocratic school at Cos in Greece. The Smith Surgical Papyrus and the Ebers Medical Papyrus, ancient hieroglyphic records of the diagnosis and treatment of disease as practiced some 3500 years B.C., carry recognizable descriptions of many diseases prevalent in the modern day world. The observations of the beloved late Prof. Elliott Smith, who by 1930 had examined the remains of some 30,000 ancient Egyptians and Nubians representing every period of the last 60 centuries, and the microscopic studies by the late Marc Armand Ruffer of carefully restored and sectioned mummified tissues, each independently bear direct testimony to the diversity and similarity of human pathologic processes then and now.

Thus, from time immemorial man has dreamed, and speculated, and philosophized about the nature and the significance of life, and has suffered, and shrunk, and fled from,—but survived,—famine and war and pestilence. This amazing world in each succeeding epoch has presented an ever increasing variety of problems, which have challenged the best minds of each age. At the very extreme of complexity, and the last to be satisfactorily approached for solution on a rational scientific basis have been the problems of human health and disease, the solution to which will present, I believe, the key to the ultimate understanding and control of human behavior.

MORE EXACT METHODS DEVISED

Superstition, philosophical speculation, false tradition, empiricism, dominated the thinking and practice of the great majority of educated men until well along in the last century, and it was not until the turn of the present century, that, like the shedding of a chrysalis, the basis for health was transformed from a cumbersome, descriptive classification of disease to an exact experimental science for the accumulation of verifiable facts about disease. Today, we are seeing the natural result of this metamorphosis in methods and technics, derived from the basic natural sciences,—in a transfer of the major emphasis in medicine from authoritarian empiricism to mechanistic rationale,—from the "cure" of disease to the preservation of health through the "prevention" of disease. One by one misconceptions based upon error, or upon incomplete knowledge, are giving way under more exact methods of procedure, until we may envisage the composite, Ideal Physician of the future as embodying an appreciation and a working knowledge of all of the intricacies of fact deriving from the social as well as from the physical sciences,—a truly educated and cultured citizen of the world. From an ancient and honorable art, medical practice is rapidly emerging into a modern dynamic science of Health,—may be said perhaps to have just "come of age."

If there was ever any doubt as to which of the sciences is really basic, in relation to race survival and accomplishment, the current exemplification of the results of misdirected human ingenuity in the world about us should settle it for all time. At least the most charitable, if not the most obvious explanation for the present political chaos is that we humans have not as yet understood sufficiently completely the pathologic, antisocial individual, so that his powers and resources,—as in the case of physical and chemical forces,—may be harnessed for the advantage, and not loosed for the annihilation of the race. Only new biological facts and controls will ever permanently and intelligently permit the avoidance of recurrent disseminations of that treacherous virus, which always results in the epidemic delirium of "might makes right". Like cancer, there can be no "cure" by painful excision comparable in lasting effectiveness to "prevention" through applied intelligence. Mathematics may be the "queen of the sciences"; and Physics the "source of the basic laws for the behavior of all matter"; and Chemistry the "central science"; and Astronomy may have "the cosmos and eternity for its heroic theme"; and Philosophy may examine "the ultimate questions which give life meaning"; and Logic may "deal with the laws of reason itself"; and Psychology may attempt to "analyze the mental processes which must be used on other problems"; but at the crossroads of all the arts and the sciences stands the modern, scientific physician,—a true biologist,—even you who sit before me today,—having faithfully received, and being ever eagerly ready to receive, the slowly and painfully accumulated facts from any and every source,—appropriating, integrating, reinterpreting, **applying** these fragments of Truth to the building of stronger bodies and the development of saner minds,—both prerequisite to a happier society.

MUST BE MANY APPROACHES

The web of knowledge is vast and intricately interconnected, with threads radiating in all directions. "Any truth is many sided, even simple truth", as Lord Stamp has emphasized; "but the complex truth of today needs approach by many different methods and by many different types of mind, before we can arrive at even an approximation of the truth!" Someone learns how better to polish a prism or grind a lens, and he has reached out to the farthest star, has probed deeply into the smallest cell; and when the scientific limits of optical refraction have been reached, the physical scientist blue prints, and then constructs a 10 feet high, 700# electron microscope with a "useful magnification" of 100,000 diameters, which opens up entirely new vistas in every domain of science,—where the minutiae of detail in animate viruses as well as in inorganic molecular complexes, may be further analyzed,—for the satisfaction of human curiosity, for the promotion of greater industrial efficiency and safety, and for more effective disease prevention.

"An American develops a method of speeding up electrified particles in a sort of glorified merry-go-round—and out run the radiating and unpredictable threads of connection all over the world and throughout the whole web of scientific knowledge, touching a specialist in intermediary metabolism in New York, a physicist in Paris, an anemia specialist in Rochester, a geneticist in Russia, a cancer specialist in Boston, a metallurgist in Tokyo, a cellular physiologist in Copenhagen, a radiologist in St. Louis."[1]

U-235,—not U-boat 235,—but Uranium, radioactive, isotope 235, recently discovered and isolated by physicists at the University of Minnesota and at Columbia, through the artificial disintegration of uranium in the new atom-smashing cyclotron, has been calculated to release energy per pound of element equivalent to that now available from 5,000,000 pounds of coal or 3,000,000 gallons of high test gasoline, its ready activation in water having restimulated the physicists' vision of the ultimate utilization of elemental radio-activity as a future power source. Intravenously administered, radio-active phosphorus is now being applied in the treatment of the leukemic states, with many other applications of biologic significance, including the tracing of the distribution and the marking of the position of radio-active isotopes in complex organic molecules, in immediate prospect.

LABORATORY PROGRESS

In 1935 Prontosil, a product resulting from chemical research in the commercial dye industry in Germany, was reported by Dr. Gerhard Domagk, a German scientist, to have an extraordinary protective effect against experimental streptococcus infection in mice under carefully controlled laboratory conditions. Investigators at the Pasteur Institute in Paris then subjected this complex molecule to organic analysis and determined that its distinctive biologic function resided in one separable fraction, now known as sulfanilamide. At this point physicians at Queen Charlotte's Hospital, London, under a grant from the Rockefeller Foundation in New York, began a clinical study on postpartum puerperal sepsis with an immediate reduction in the human mortality rate of 25 per cent. You are all currently familiar with the subsequent studies at Johns Hopkins, the Mellon Institute, Pittsburgh, and with the tremendous surge of activity in chemical and experimental laboratories and in hospitals throughout the world, which has resulted in a number of additional chemical combinations during recent months which are revolutionizing our chemotherapeutic approach to the infectious diseases.

Intriguing in the extreme have been the observations by René Dubos in Dr. Avery's laboratory at the Rockefeller Institute, which have culminated, after a decade, in the isolation of new bacterial species from soil,—some with carbohydrate splitting enzymes highly type specific for pneumococci; others with bactericidal properties strictly limited to the gram positive group of pathogenic micro-organisms. These studies would seem to have fully established the mechanism in Nature by which the long recognized decomposition of all organic matter is accomplished. To discover and harness these forces further in the interest of many still unsolved problems in medicine is an attainable goal today. The possibilities provide a rich field ready for immediate cultivation with assurance of a certain harvest.

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[1] The Rockefeller Foundation—A Review for 1939. By Raymond B. Fosdick.

CO-OPERATIVE EFFORT NECESSARY

Thus, if there is any lesson which we of this era should have learned from the past, it is the basic necessity for persistent co-operative effort. If the common problems which civilized man faces today are to be solved successfully, the cooperative intelligence of many minds, wherever existing, irrespective of race, color, creed or narrow sectarian viewpoint, must be focused sharply upon them. Peace—progress—our very existence are seriously threatened through failure to fully appreciate the universality of this fundamental principle — applied economically, socially and politically, as well as scientifically. Scientific medical leadership in recent years has perhaps recognized this challenge more clearly, and realized its **sine qua non** for survival more fully, than many in other walks of life. Epidemic disease is no respector of geographic and racial boundaries, or of economic, political and social differences, and medical science has had to look to and embrace the intellects capable of solving its problems wherever they have appeared on the face of the earth. Moreover, medical leaders everywhere co-operate in an international health cordon for the dissemination and application of this knowledge, as it becomes available. With transportation and intercommunication in the world today, such that a yellow fever carrying mosquito in an airplane wing on the west coast of Africa this morning, may tomorrow be either in continental Europe or South America, and mayhap the next day on our own eastern seaboard, one cannot evade the reality of the imminence of invasion by disease, even though there be some difference of opinion as to the immediate significance of such feats, with reference to other more obvious forms of invasion.

A WAR TO PRESERVE LIFE

Referring to the first discovery in Natal, Brazil, in 1930 of an invasion from Africa, via airplane or fast French destroyer, of the dreaded malaria-carrying mosquito, Anopheles gambiae, Dr. M. A. Berber, a distinguished malariologist, recently said: "The invasion of gambiae threatens the Americas with a catastrophe in comparison with which ordinary pestilence, conflagration, and even war are but small and temporary calamities. Gambiae literally enters into the very veins of a country and may remain to plague it for centuries." The plans of the campaign against gambiae, directed by the Rockefeller Foundation and financed jointly by the various participating countries of the Western Hemisphere, sound like the plans of any army on defense. "A Maginot line of fumigation posts on all outgoing roads along the frontiers of the infested territory has been established, the whole region is being mapped from the air as to pools, ponds or other collections of potential breeding water, every house is being searched for adult mosquitoes with insecticide sprays, and every automobile and train that leaves the infested area is stopped, inspected and fumigated. A maritime service has been organized at points along the coast to disinfect every boat or plane bound for clean ports". It is war in a very real and grim sense, as outlined before the recent Pan-American Health Conference in Washington last month, but its purpose is the preservation of human life.

"THE AMERICAN DISEASE"

We may agree, perhaps, then, that one of the most important functions being subserved by medical science in the present day is its exemplification of the necessity for, and its demonstration of the ways and means of organization and administration toward co-operative effort **within** the nation and **between** nations. The machinery, the knowledge and the necessity are quite satisfactorily integrated to accomplish a reasonably creditable result in the domain of somatic disease, and the attainments of today give promisory assurance of an ever increasing effectiveness of future control in this area. It is in the realm of the social sciences, that technics remain to be developed and facts to be accumulated, which will round out the physician's therapeutic armamentarium. Whereas famine, and strife, and disease have acted individually, and frequently coincidently, in the past, in the role of Lord High Executioner for the race, and as mediators of the law of the "survival of the fittest", it is no longer the physical alone, but the social and economic forces attendant upon the transition from a slow-tempo agrarian to a high-tempo industrial, mechanized civilization, which are picking out the constitutionally unfit and eliminating the psycho-biologically inferior, in peace and in war. The American disease, as Emerson and others have designated it, challenges the best effort and skill of the modern physician and social worker. This disease camouflages under numerous and varied symptomatologies, but the common denominator of them all is the highly altered tension under which life is lived today, as contrasted with a few decades ago.

The startling increase in suicides among young individuals, and in the number of mentally unbalanced youths of both sexes requiring institutionalization, compares favorably with the incidence of infectious disease in the similar age group a century ago, and is as direct a measure of CNS decompensation under modern stresses and strains as anuria of renal, or dyspnoea and oedema of cardiac decompensation. Reports from abroad indicate that for every four airplane pilots killed as a direct result of combat, six lose their lives because their judgment becomes faulty or their bodies are unable to stand the strain of the centrifugal-induced "anoxemic", mental "black-out", which accompanies violent maneuvers. Some American authorities insist that "pilot failure" is accounting for six out of seven deaths in this war. At Wright Field and at the army's school of aviation medicine at Randolph Field, Texas, these problems are being resolved in the field of pure physiological research, the answer to prove whether the human machine is being overloaded. The human body is a delicately adjusted, exceedingly complex mechanism with very definite limitations which vary constitutionally from individual to individual. The psyche is more important to its proper functioning than many of the organic processes which have received such careful and detailed study in the past. The central nervous system of man by the very nature of its integrating, governing and association functions reflects this crowning achievement in organic evolution on the earth today. The material creations of this collective brain, nevertheless, are not being "intelligently" directed and mastered and kept servile to objectives and ends, which are for the best interests of the race as a whole. The social and natural sciences must together advance even more clearly and definitely into this domain of modern life and, with increasing factual data upon which to base judgments, make certain that a leadership fully conscious of the lurking dangers as well as the potential possibilities directs our destinies.

ART AND SCIENCE

I am sure I have said enough for you to sense the philosophy I would share with you today, for whatever it may be worth. I am quite aware that each man must stand on his own feet and find justification and rationalization for his own conduct. After thousands of years of human evolution it is not easy to demonstrate that man's inhumanity to man today is less than in the days of Ghengis Kahn, or Caesar or Alexander. Yet the scholar's weapon must always be the mind, and the physician's must ever be that rare combination of art and science which ministers without prejudice to the whole man, to his spirit as well as to his body, with a never waning sympathy marked by understanding, and with a tolerance born of an intimate knowledge of the complexity of his psychosomatic background which conditions every action and may account for all of his individual and collective eccentricities.

We may not remain, therefore, as cynical, detached spectators of our human tragedy, scientists though we profess to be, and cooly objective in our experimental laboratories! Apropos, is an excerpt from a sermon, "The Bell," by an ancestor who lived in the 16th Century, by name John Donne. It runs as follows: "No man is an Iland, entire of it selfe; every man is a peece of the Continent, a part of the maine; if a Clod bee washed away by the Sea, Europe is the lesse, as well as if a Promontorie were, as well as if a Manor of thy friends or of thine owne were; any man's death diminishes me, because I am involved in Mankinde; and, therefore, never send to know for whom the bell tolls; It tolls for thee." Despite the fact of war in Europe and Asia, this philosophy is not the liability which the pessimist might insist, for I have suggested the factual accomplishments of today and the scientific promises of tomorrow which should arouse and maintain in you and in me now, the thrill, which has animated and sustained the Truth Seekers of every age under every kind of adversity, and which has been so cogently expressed for all time by the great savant-physiologist, Claude Bernard: "Ardent desire for knowledge, and this knowledge really grasped, and yet always flying before them, becomes at once their sole torment and sole happiness. Those who do not know the torment of the unknown cannot have the joy of discovery, which is certainly the liveliest that the mind of man can ever feel. But, by a whim of Nature, the joy of discovery, so sought and hoped for vanishes as soon as found. It is but a flash, whose gleam discovers for us fresh horizons toward which our insatiate curiosity repairs with still more ardor. Thus even in science itself, the known loses its attraction, while the unknown is always full of charm."

Granted that we are observing the passing of an era, that a new one has already begun, is it too late to hope, or too egotistical or remote to believe, that many, if not all, of our present seemingly insurmountable economic and social problems would yield more readily and happily to human ingenuity and intelligence, if world leaders and their respective followers were alike endowed with a larger share of their rightful heritage of normal mental and physical health?

Congenital Defects of the Femur: Report of Case

HERBERT F. VAN EPPS, M.D. and D. H. DOWNEY, M.D.

CONGENITAL defects of the femur are comparatively rare. Cases have been reported in the past few years by Neviaser, Ramsey, Meyers, Mukerji, Veitch, Freund and Langston. The latter believes the deformity can be regarded as a definite though rare clinical entity. His description follows: "The deformity may be unilateral or bilateral. The lower epiphysis of the femur is normal or relatively normal in appearance, although reduced in size compared with the normal limb of the unilateral case. The shaft of the femur is in a large part absent, being represented by a short bar of the bone tapering upward from the lower epiphysis to a small irregularly shaped head. The hip may be dislocated but more commonly a gross degree of coxa vara is present. Commonly associated defects in the same limb are an absence of the fibula with outward bowing of the tibia and valgus deformity.

"Clinically the affected leg is grossly shortened in an unilateral case, the foot frequently being at, or only slightly below the level of the knee on the sound side. This shortening appears to be almost entirely in the shaft so that the limb has the appearance as if the knee follows immediately on the hip. The limb is held in a characteristic position of right angled flexion at the hip and knee. Movement in both joints is considerably limited."

The etiology of such defects are obscure. Brailsford states that the most common congenital defect of the shaft of the femur is retardation of the ossification of the upper half. At first the X-ray suggests that the upper half is missing, but at a later stage radiography shows ossification of the whole bone which is stunted, because being deprived of normal stimulous, growth is defective.

Reiner worked out a theory, based on different vessel systems in the growing femur to explain the different forms of congenital defects of the femur. The amniotic membrane has been accused of being responsible for the development of congenital deformities either by inflammatory adhesions or simply by decreased amount of amniotic fluid.

CASE REPORT

Mrs. H. R., age 27, black, Para VIII, Gravida IX, was first seen February 7, 1940, when about eight months pregnant.

Past history—She had been married ten years and had six living normal children. Twin boys had died shortly after birth. Her pregnancies had been normal. Her last menstrual period was June 1, 1939.

Examination at her first visit was negative except that the head was definitely felt in the fundus, two finger breadths below the xiphoid.

The patient was not seen again until March 4, 1940 at 2:00 A.M. She had been in active labor for one hour, and pains were every four minutes. Examination at the time showed the cervix four fingers dilated with a breech pre-

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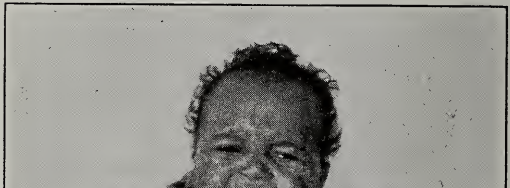

Figure 1.—Showing characteristic position of leg with shortening. Age, 3 months.

Submitted October 8, 1940.

sentation. She was given seconal gr. IV and hyoscine gr. 1/100. She delivered at 3:30 A.M. a 5½ pound baby boy, after a very easy labor.

The left hip was deeply discolored. The ecchymosis extending from the ilium over the buttock to the knee. The left leg was definitely shorter than the right. (Fig. 1) The left foot was just below the level of the right knee. Active and passive movement of both joints was limited.

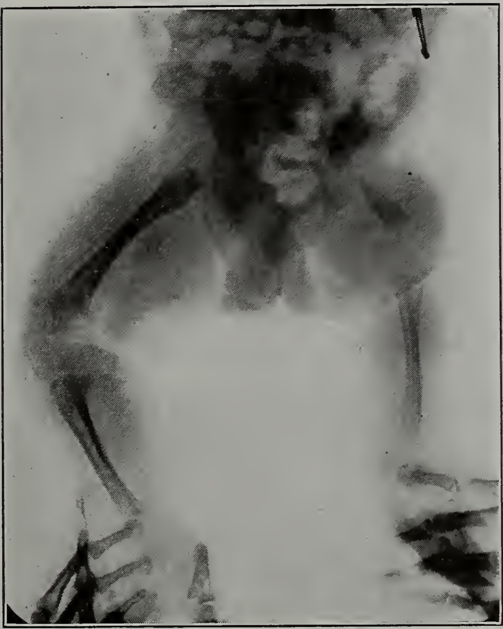

Figure 2.—X-Ray of Femur. Age, 3 months.

X-ray (Fig. 2) shows gross defect of the left femur. The distal epiphysis and diaphysis are approximately normal in outline though showing a marked diminution in size. Above the diaphysis the shaft tapers to a beaked upper extremity and the head appears to be an irregular area of bone.

X-rays taken three months later reveal normal growth of leg and foot from knee down with but slight change in femur.

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Nothing is more important at the present time than to continue and to intensify the campaign against tuberculosis and against syphilis, and I hope that no one will permit his attention to be swayed from the objectives we have in mind, because the fight against these diseases is more important at a time of crisis as a measure of national defense than it is in normal times.—Frank C. Boudreau, M.D.

Botulism

Botulism is produced in human beings by the ingestion of food containing the toxin created by the Bacillus botulinus. This organism is resistant to heat, and because of this, canned foods are prone to contain the organism in viable condition as well as the toxin produced after canning. Since home canning usually does not provide steam pressure for the length of time necessary to render these bacteria harmless, such foods are generally the most dangerous. Foods that contain this infection solely usually show so little change in color, odor or taste that they are unsuspected. It appears that practically all foodstuffs may harbor the organism even in a relatively fresh state. Formerly meat products were thought to be the chief source of infection. The manifestations of the disease appear to be due to a definite poisoning of the central nervous system by the toxin already in the food, rather than to bacterial activity in the body. The toxin is readily destroyed by boiling and it is probably true that a contaminated food would be rendered harmless by this procedure even though spores of the organism were still present. If sufficient time is allowed after boiling, more toxin would certainly be created.

As seen clinically, botulism presents symptoms varying in the individual case with the amount of the toxin ingested. It is not thought that any further toxin is produced in the body. The time elapsing between ingestion and appearance of characteristic signs, and the number and severity of these signs, seem to be dependent upon the quantity of toxin consumed. Undoubtedly the so-called classical cases, in which violent symptoms are seen and death occurs within one or two days, are simply due to an overwhelming dose of the poison. These are so rapidly fatal that rarely is a diagnosis made before death occurs.

Diagnosis is to be made upon a history of gastrointestinal upset of varying degree, together with most or all of the following signs:

Visual disturbances appear from 24 hours to several days after the acute upset. There is diplopia, lateral rectus paralysis, nystagmus, disturbance of accommodation, ptosis, and, at times, weakness of other eye muscles. The eye grounds are normal in the absence of previous disease.

Vertigo is marked and may or may not be accompanied by vomiting.

Decreased salivation may be seen. Difficulty in swallowing is present at times.

Generalized muscular weakness and incoordination may be mild or extreme.

Absence of fever or pain is usual.

There is increased pulse and respiratory rates with no explainable cause other than irritation of the medullary centers.

Examination will show essentially normal laboratory findings in the blood, urine and spinal fluid.—M. E. Black, M.D., Clearwater; Jour. Fla. Med. Assn., Vol. XXVII, No. 8, February, 1941.

Use of Diuretics in the Treatment of Certain Localized Edemas

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The Author

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One may define edema as a pathological condition in which fluid accumulates excessively in the tissues or serous cavities of the body. It is an extremely common and highly characteristic feature of many diseases and has held the interest of clinicians for many years. While our understanding of some of the physicochemical processes involved is not complete, we have learned, and must keep in mind, certain fundamental principles in guiding our treatment.

MECHANISM OF EDEMA

In his "oncotic theory", Starling, in 1896,[1] pointed out that the passage of fluid between the blood stream and the tissues is the result of a balance of two factors, namely, (1) the hydrostatic effect of the capillary blood pressure which tends to force fluids out of the vessels, and (2) the osmotic pressure of the non-diffusible colloids (colloid osmotic pressure), chiefly plasma proteins, which tends to draw fluid back from the tissue spaces into the blood stream. This theory has been advanced and demonstrated practically by Krogh,[2] Christian,[3] Weech,[4] Youmans,[5] and others.

The mechanism of edema formation is not always as simple as this, however, for other factors, such as increased capillary permeability, lymph drainage, and nervous factors, must be considered also. These various factors, which may act singly or together in the formation of edema, are shown in Figure 1.

Filtration pressure
Osmotic pressure
Permeability of vessel wall
Salt content of the tissues
Lymphatic drainage
Nervous control
Endocrine disturbances

Fig. 1. Factors Involved in Edema Formation.

THE EFFECT OF EDEMA

Edema, whatever the type, is never beneficial to the patient. From the clinical point of view it may be regarded from two different angles, (1) edema as an index or sign of pathologic disturbances and their progression, and (2) edema as a cause of discomfort and disability to the patient.[3] It is this second feature which we wish to consider specifically in this discussion. It appears to obtain particularly in localized edema of an arm or leg.

In the earlier studies of edema most attention has been given to the cardiac and renal types, i.e., generalized edema. In generalized edemas, the first four factors listed in the table have received the greatest emphasis. More recently, studies of local tissue fluid accumulation have evolved which have crystallized our knowledge considerably. These refer to the contributions of Drinker,[6] Homans,[7] and Allen,[8] which have emphasized the importance of the lymphatics in certain edemas of the extremities, particularly in localized edema.

In addition to venous and osmotic pressure, the vessel permeability, and the state of the lymphatics, Ochsner and De Bakey,[9] following the suggestion of Leriche, have pointed out the significance of vasospasm in certain types of edema of the extremities, for which they advocate treatment by sympathetic block. Thus, in certain swellings of the limbs, the edema is probably the combined effect of venous and lymphatic obstruction re-enforced by peripheral vasospasm.[7]

Coupled with these findings are the important studies of Sodeman and Burch[10] in which they measured by a direct method the pressure exerted by edema fluid localized in subcutaneous tissues. They found the tissue pressure to be elevated, to as much as 338 mm. of water, in all types of peripheral edema, regardless of the cause. Consequently, apart from the discomfort which edema may cause to the patient, one must consider the probability that increased tissue

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Read before the Section on Medicine, Ohio State Medical Association, Ninety-fourth Annual Meeting, Cincinnati, Ohio, May 14-16, 1940.

I wish to thank Doctors Henry A. Christian and Soma Weiss of Boston for permission to report Cases 1 and 5, and Doctor Lewis F. Smead of Toledo Hospital for Cases 10 and 11. I am indebted to Doctors Ziegler and Light of the staff of Lucas County Hospital for their aid in securing data on the cases from that hospital.

pressure may cause further impairment of the already disturbed circulation, arterial, venous, and lymphatic, to the part. Its persistence may interfere definitely with improvement. Thus, edema may become a serious complication which tends to establish a vicious cycle by the deadening effect of the tissue distention. This further warrants serious consideration of its treatment.

TREATMENT OF LOCALIZED EDEMA

Heretofore, most of the treatment that has been directed against localized edema of an extremity has been surgical. This has been so probably because most such edemas have been considered to be obstructional in type (chiefly venous obstruction), and they have been left go for such a long period of time that the swelling becomes chronic, tissue fluid protein becomes increased, with fibrous tissue proliferation and fibrosis and with permanent changes of a fibrotic sort resulting.[7] With such changes, anything short of surgery would seem to do little or no good. Hence, we have the Kondoleon and other types of operation which often, too, are not so very successful.

At present, with the excellent advances that have been made with the mercurial diuretics, from the introduction of novasurol by Saxl and Heilig in 1920,[11] of salyrgan by Bernheim in 1924,[12] to the presentation of mercupurin (salyrgan with theophylline) by von Issekutz and von Vegh in 1928,[13] it seems strange that their use has not been given more consideration in this connection, at least in the literature. Frequent comments have been made concerning the effectiveness (or ineffectiveness) of these preparations in the treatment of pleural effusion or ascites. But in the last ten years I have been able to find only two references to the use of a mercurial diuretic in the treatment of localized edema of the extremities. In 1933, Dr. De Takats of Chicago,[14] in a consideration of acute thrombophlebitis, mentions that "the most active dehydration can be accomplished with mercury diuretics, notably salyrgan." Two years ago, Doctor Petty, at the British Hospital in Buenos Aires, reported in the British Medical Journal[15] the successful use of salyrgan intramuscularly in the treatment of eight cases of localized edema following trauma to an extremity.

THE ACTION OF MERCURIAL DIURETICS

Without going into any detailed discussion of the action of the mercurial diuretics, a few remarks should be made. The present opinion seems to be that the mercurial substances exert their effect chiefly by a direct action on the kidney, rather than extra-renal, by causing a decrease of tubular reabsorption of fluid.[16-20] Mercurial diuresis causes an increased chloride and decreased bicarbonate output in the urine with resulting decreased chloride concentration and increased bicarbonate concentration in the blood serum. The peripheral venous pressure may drop, proportional to the degree of diuresis,[21] and the plasma volume of the blood may become altered.[22] But these changes are usually slight in degree. Furthermore, the more recent mercurial diuretics have been found to have no harmful effects in the average normal person.[16] Now that mercupurin seems to exhibit less tendency to toxic effects than salyrgan, mercupurin was chosen to be used in carrying out this study. From the known action of this drug, or similar compounds, mercupurin seems to be approaching an ideal type of diuretic. The theophylline portion is supposed to increase the glomerular filtration and as already stated, the mercurial portion prevents tubular reabsorption, with a copious diuresis often resulting. The amount of diuresis will depend, of course, upon the amount of extracellular fluid available for excretion.

METHOD OF STUDY

On the basis that local edema, as of an arm or leg, is uncomfortable to the patient, and that by its pressure exerted on the tissues locally it may be an important factor in establishing a "vicious circle" that delays proper recovery, the local swelling should be attacked promptly. Heretofore, elevation, hot packs of magnesium sulphate, water bottles, etc., etc., have been the chief approach to this problem. Such procedures, particularly the hot packs, frequently add to rather than lessen the patient's discomfort. When applied for several days at a time, we have all seen maceration of the skin result.

Patients were selected who had localized edema of a part, but no evidence of significant cardiac or renal disease as a cause or playing any significant rôle. In the usual studies of edema that have been carried out, the effectiveness of diuretic response has been measured in terms of the output of water and the loss of body weight. It is notoriously difficult, in any hospital ward, even under the best of circumstances, to have an accurate check on water output. In this study it seemed to us more accurate, in order to evaluate results better, to take measurements of anatomical points, using the uninvolved extremity as a control, in addition to a photograph taken before and after the diuresis. Except Case 10, which was ambulatory, all patients were at bed rest, with the edematous extremity elevated for a variable period of time to determine the effect of gravity alone on reducing the edema. All hot fomentations or packs, when present, were removed and the limb was left free. When a stationary state was reached, measurements and photographs of the involved and control extremities were taken. Between 8:00 and 9:00 a.m., without any acid-salt prepa-

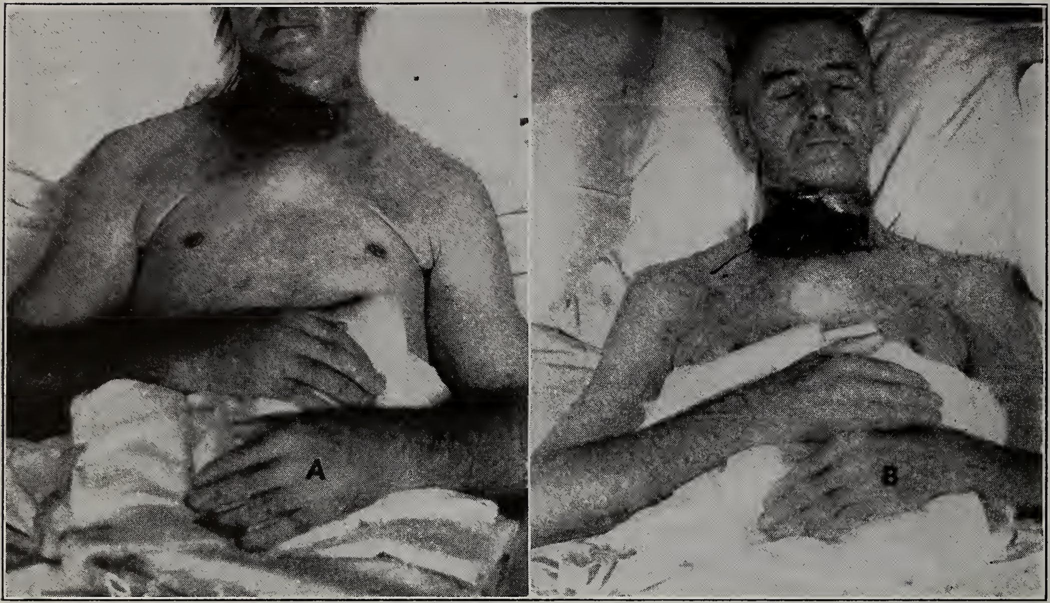

Fig. II. Case 2. A, before and B, after two injections 2 cc. Mercupurin, showing effect on obstructional edema.

ration, 2 cc. of mercupurin were injected intravenously and the fluid intake and output charted. The following day measurements of similar points and another photograph were taken. In the event the diuresis was ineffectual, the patient was given ammonium chloride, 15 grains four times a day for two days, then another 2 cc. mercupurin given intravenously and the results recorded. Because early in this study several of the patients had anorexia and nausea with their illness and probably could not tolerate ammonium chloride, the majority of the patients were given the mercupurin alone, to determine if an acid-salt is essential in its action. The facilities under which this study was carried out were not such that a critical evaluation of this point could be made. Nevertheless, it was thought of interest to observe. A total of 12 cases is reported.

TYPES OF LOCAL EDEMA STUDIED

1. **Obstructional Edema.** Case 1. A.P. (P.B.B.H. Med. No. 53577). This was a 56-year-old Polish tailor who entered the hospital with marked acute swelling of the face, neck, chest, and arms due to obstruction in the superior mediastinum. His chief complaint was discomfort from the swelling. He had some cough but no chest pain. The heart was normal, blood pressure 110/70. Urine, negative. Five diureses at four-six day intervals with mercupurin, 2 cc. intravenously, produced an output of urine that varied between 1800 and 4200 cc., with almost complete subsidence of his edema. Unfortunately we had no photograph before the diuretic to show the very massive edema. But the circumference of his neck decreased from 41.0 to 37.5 cm., and the arms from 30.5 to 22 cm. The cause of the obstruction to the superior vena cava was never determined by numerous studies, but on this regime he was kept edema-free and comfortable for four months before his death. Autopsy was not obtained.

Case 2. W.F. (L.C.H. Med. No. 03987). This was a white male of 54 whose illness began in January, 1939, with swelling and pain in the thyroid region. The mass continued to grow to the "size of an orange" and on April 6 a thyroidectomy was performed. The sections showed cancer. The wound never healed satisfactorily and on October 13, the patient entered the Lucas County Hospital because of epigastric pain, nausea, and vomiting, and increasing swelling of the face, neck, and upper extremities. The heart was normal, blood pressure 120/70. Urine negative. His average urinary output was 600-800 cc., but with 2 cc. mercupurin intravenously, he voided 2100 cc. and 1100 cc. respectively on two occasions. Because of his gastric disturbance, no acid- salt had been given in preparation. Certainly the course of his illness was not changed by this procedure, but he was made definitely more comfortable. He died shortly thereafter, and autopsy revealed the thyroid carcinoma with extensive metastases, metastatic occlusion of the superior vena cava, and normal heart and kidneys.

In both these patients, particularly in Case 1, the relief of the pressure from edema made them more comfortable.

2. **Traumatic Edema.** Case 3. E.C. (L.C.H. Med. No. 04606). This was a white male of 22 who, in a drunken stupor, suffered a severe deep laceration of the right anticubital fossa. When he entered the hospital the wound was bleeding severely, the radial and ulnar pulse were not obtainable (? Leriche spasm). To stop the terrific loss of blood a more or less "mass ligature" was applied to the anticubital vessels by an interne. Several hours later a careful dissecting operation was performed releasing the brachial and

radial artery, medial and cephalic veins. The ulnar artery had to be severed and tied. In the next several days the arm became swollen quite markedly, with fever. Elevation caused no improvement. The heart was normal, blood pressure 110/70. Urine negative. The right wrist measured 17 cm., right elbow 25 cm., and the right arm (supra-condylar) 22.8 cm. as against 15 cm. for the left wrist, 23.5 cm. the left elbow and 21.5 cm. for the left arm. A single injection of 2 cc. mercupurin intravenously caused a diuresis of approximately 1020 plus cc. (patient used lavatory twice while not being watched) with almost complete subsidence of the edema. Now the right wrist measured 16.25 cm., the right elbow 24.0 cm. and the arm (supra-condylar) 22.5 cm. The fever subsided, the radial pulse became palpable, and improvement was rapid. The wound healed promptly.

Case 4. M.Z. (L.C.H. Med. No. P 1097). This was a 75-year-old widow who fell on the ice March 14, 1940, striking on her right hip. An X-ray showed no fracture. She was put to bed and almost immediately the entire right lower extremity became swollen. It was not painful. Further examination was essentially negative, except for rather marked arteriosclerosis, old varicose skin lesions of both lower legs, a heart of normal size with soft blowing apical systolic murmur, blood pressure 110/75. Urine negative. Elevation was begun without much effect. The right foot, proximal to the toes, measured 26.5 cm. (left 24.5 cm.), around the ankle 31.5 cm. (left 28.5 cm.), above the ankle 26.0 cm. (left 21.0 cm.) and around the largest part of the calf 37.0 cm. (left 30.5 cm.). Two cc. of mercupurin intravenously produced only 850. cc. urine and no appreciable change in the edema. She was then given ammonium chloride, 60 grains a day for three days, and a 2 cc. dose of mercupurin repeated. This produced a diuresis well over 1000 cc. (patient incontinent twice) and a prompt reduction in edema. After this diuresis, the right leg measured 24.5 cm. at the toes, 29.5 cm. around the ankle, 22.5 cm. above the ankle and 33.0 around the same point of the calf. The measurements of the left leg were essentially the same as before. There was no edema of the left foot or ankle.

Traumatic edema, of which "sprained ankle" is a classical example, probably would respond to this form of therapy. We had one example of sprained ankle come under our observation which responded splendidly to this treatment. In Case 3, venous obstruction was also a factor in all probability, due to the mass ligature that included numerous veins. Case 4 gave a history of varicose veins many years ago, but these had caused no recent difficulty. Her recovery was prompt after ammonium chloride salt preparation had been carried out.

3. **Inflammatory Edema.** Case 5. (P.B.B.H. Med. No. 53677). E.K. was the case of a 21-year-old student nurse who developed a severe chemical dermatitis venenata while on duty in the operating room. She had had similar lesions several years before while studying chemistry at college. The skin lesion began as a small vesicular eruption of the fingers which spread to involve the hands and forearms as high as the elbows, with marked swelling, scaling, crusting, fissuring and weeping of yellowish secretion. There was intense itching and severe pain. The remainder of the examination was entirely negative, normal heart and urine, blood pressure 120/80. Scrapings of the epidermis were cultured on Sabouraud's medium with no growth in eight days. Dr. E. Lawrence Oliver saw the patient and stated that the character of the lesions resembled pompholyx. When boric soaks, heat, calomine, and elevation caused no improvement, she was given three injections of salyrgan or mercupurin, 2 cc. intravenously, with prompt diureses varying from 1700 to 2400 cc., prompt subsidence of edema and almost miraculous improvement in the skin lesions. She was given also three units of insulin every other day at Doctor Oliver's suggestion, which seemed to hasten the improvement. Why that should help I do not know.

Case 6. W.K. (L.C.H. Med. No. P 939). This was a 45-year-old machinist who had been a morphine addict for 30 years. He had always given himself injections in the arm, never in the leg. About December 25, 1939, he noticed an ulcer on the posterior calf of the right leg. The leg became swollen, and he learned to reduce it somewhat with hot soaks of epsom salts. But the ulcer continued to enlarge. On admission to the hospital in March, 1940, he presented a 3 cm.

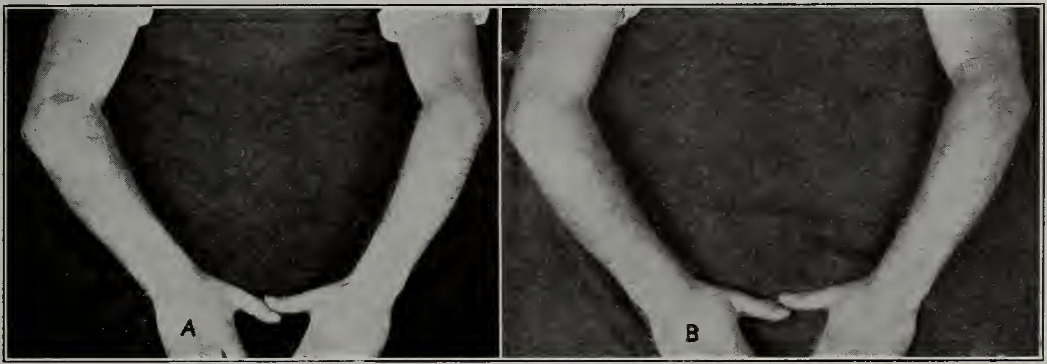

Fig. III. Case 3. Showing the effect of Mercupurin on traumatic (with obstructional) edema of the arm. A, before and B, after 2cc. Mercupurin.

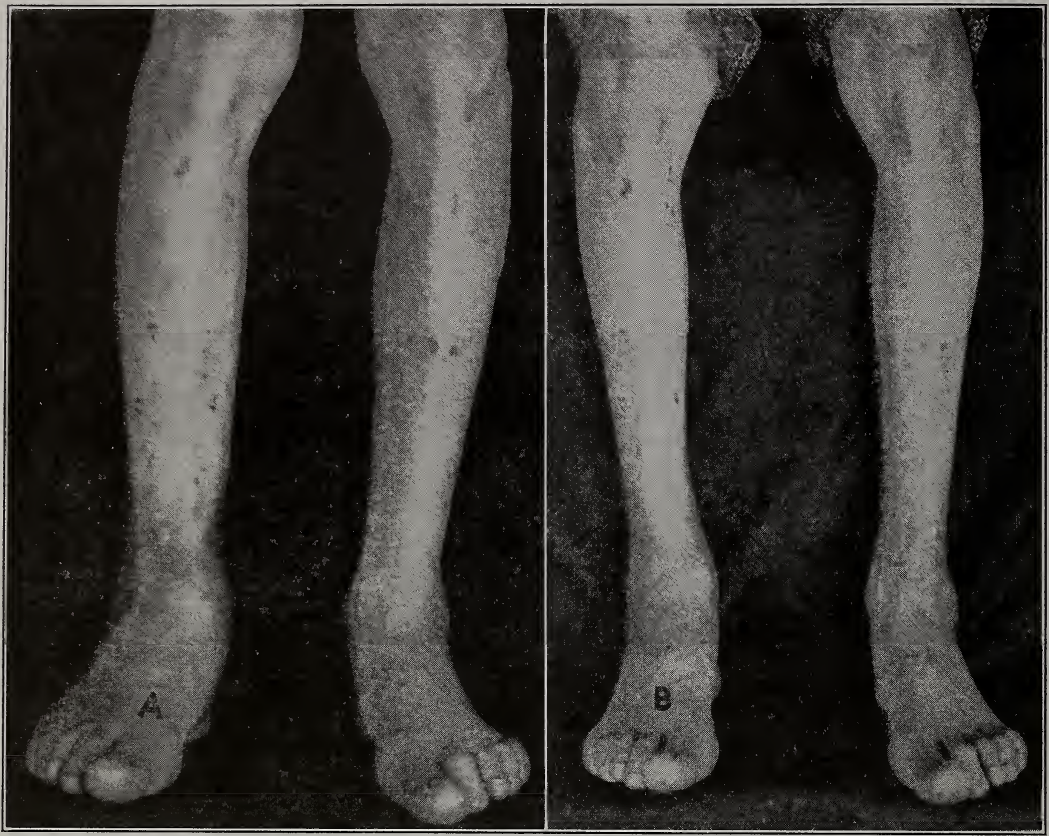

Fig. IV. Case 6. Inflammatory edema of right leg. A. before and B, 48 hours after 2cc. Mercupurin intravenously.

ulcer of the right calf with considerable swelling, redness and heat of the right foot and ankle. Temperature 101-102 degrees. The remainder of the examination was not remarkable except for carious teeth, red tongue, normal heart, blood pressure 112/70, and urine with 1 plus albumin. The blood showed no anemia, total protein 7.1 per cent, with albumin 3.9 and globulin 3.2. Instead of applying hot fomentations, the leg was left open on a clean pad, and 2 cc. mercupurin given intravenously. Around the plantar arch the right foot measured 27.0 cm. (left, 25.0 cm.), at the ankle 21.5 cm. (left, 19 cm.), and at the level of the external malleolus 29.0 cm. (left, 26.0 cm.). The diuresis produced a good output of urine and 48 hours later the measurements of the right foot were: instep 25.0 cm., ankle 18.5 cm. and above the ankle 26.0 cm. The measurements on the left were essentially as before. With this relief of edema, the fever subsided promptly and the ulcer healed rapidly.

Case 7. J. McB. (L.C.H. Med. No. P 151). This was a male, aged 62, who was picked up in the street having laid exposed to the cold the night of January 12, 1940. He had beginning gangrene of both heels, that on the left requiring excision. He gave a history of having had circulatory disturbance of the legs for eight months. The left foot and ankle showed marked edema, with infection of the left heel. The remainder of the examination showed marked arteriosclerosis, heart slightly enlarged, blood pressure 140/90, lungs clear. Urine contained 1 plus albumin and a few casts. For two months he was kept at bed rest, with hot fomentations intermittently, but with his insistence on hanging the foot over the edge of the bed, the edema persisted and increased. On constant elevation alone, it subsided a little. The measurements of March 29 were: left foot, proximal to toes, 25.0 cm. (right 24.0 cm.), around the left ankle, 29.0 (right 25.5 cm.), and above the left ankle 22.0 cm. (right 20.5 cm.). An injection of 2 cc. mercupurin intravenously caused no diuresis and no improvement in the edema. In fact, the edema increased. He was then placed on ammonium chloride, 60 grains a day, and elevation, and after two more injections of mercupurin, with an output of 2000 and 2200 cc. urine, the edema subsided so that the distal left foot measured 23.0 cm. and at the ankle, 26.0 cm. Following this the heel lesion began to improve and recovery was rapid. Still under observation, when he is up and about, there is slight recurrence of pitting edema.

Case 5 may be considered to be essentially an allergic edema, but the breaking of the skin and the weeping caused secondary infection with lymphangitis. The skin lesions improved promptly after the edema was controlled. The nature of the ulcer in Case 6 was obscure. It did not have the appearance of a gumma, the blood serology was negative, and it was not associated with varicose veins. It appeared to be traumatic. Associated with the ulcer was rather severe superficial cellulitis of the foot and ankle. The ulcer and cellulitis subsided quickly after the edema was controlled. The partial failure in Case 7 may be explained perhaps by the long time the edema had persisted before active diuresis was attempted. Nevertheless, some improvement was obtained with the institution of ammonium chloride preparation before the second and third trials of mercury. Recurrence of edema, in a case of long standing as this one, may be explained by the loss of tissue elasticity from long-continued distention, leaving a potential space for edema re-accumulation. This hypothesis is borne out by Sodeman's studies which showed that tissue pressure in edema returns to normal after a variable period of time, with the tissues still in a stretched state.

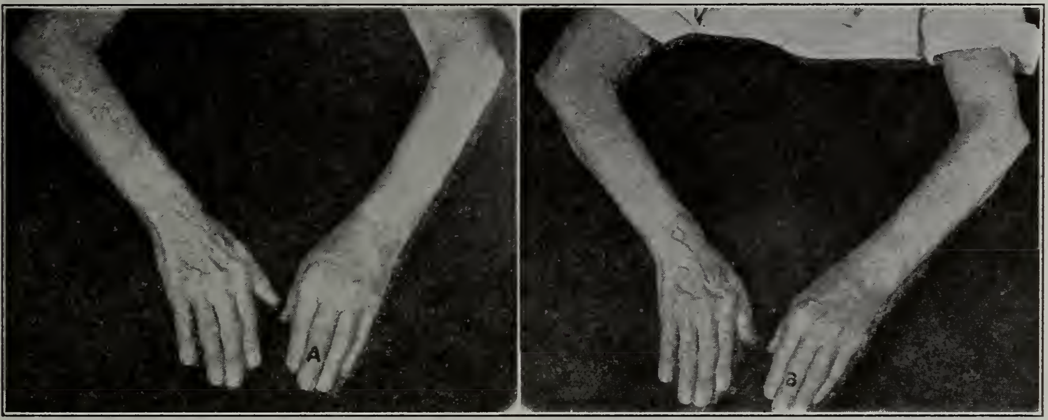

Fig. V. Case 8. Acute Thrombophlebitic Edema. A, before and B, after 2cc. intravenous Mercupurin.

4. **Thrombophlebitic Edema.** Case 8. M.C. (L.C.H. Med. No. N 5651). A white housewife of 63 entered the hospital complaining of severe pain of the left elbow with swelling of the arm and forearm. This had developed suddenly with pain in the antecubital fossa, and increasing swelling. There was no history of trauma and no evident cause for an embolus. This illness had been preceded by an attack of the "flu". On examination there was normal heart with normal rhythm, blood pressure 128/80, clear lungs and 1 plus sugar in the urine. An electrocardiogram was negative, an X-ray of the arm showed normal bones. The left upper extremity was swollen from shoulder to finger tips, with areas of redness and heat on the dorsum of the left hand. The left breast was tender to touch. A diagnosis of lymphangitis had been made and the patient begun on hot packs and sulfanilamide, although there was not the type of fever, chills, or streaking of the arm to indicate such a condition.[23] The diagnosis appeared to be either an acute cellulitis or more probably an acute deep thrombophlebitis. The hot packs were removed and the patient given two injections of mercupurin intravenously with prompt subsidence of edema and rapid recovery. Four days later the patient felt she was improved sufficiently and signed her own release from the hospital.

Case 9. S.H. (L.C.H. Med. No. 04437). A white married woman of 40, with no rheumatic history, but with mitral stenosis and aortic insufficiency, entered the hospital complaining of fatigue for one year and pain over the precordium. With petechiae of the palate and chest wall, an enlarged spleen, and positive blood cultures for Str. viridans, the diagnosis was subacute bacterial endocarditis. She was moderately decompensated. On digitalis and sulfanilamide therapy she improved to be free of edema, but developed anorexia and nausea, for which intravenous clyses of glucose in saline were administered. Following one of these clyses she developed severe pain and tenderness at the site of injection, which became an acute thrombophlebitis, with swelling of the forearm and hand. This was extremely uncomfortable. Up to this time her average urinary output was 400-1000 cc. daily. Because of the stomach upset, ammonium chloride could not be given. The right arm, at the elbow, measured 22.0 cm., at the radial styloid 16.5 cm., and at the metacarpophalangeal junction 20.4 cm. Two cc. of mercupurin intravenously (into the left arm) produced a good diuresis of over 2000 cc. and prompt subsidence of edema, making the patient much more comfortable. One injection was sufficient in this case. After the diuresis, the same measurements were —right elbow, 21.5 cm., wrist 14.5 cm., and hand 16.5 cm. This patient died about two weeks later and no autopsy was obtained.

These are instances of acute thrombophlebitis with edema that responded very well In case 8, because of the redness on the back of the hand, one must consider also an infectious type of thrombosis in the arm which must have been present in the peripheral vessels with progression toward the body (Homans).

Several instances of acute thrombophlebitis of the legs, not illustrated here, have been treated successfully also by this method. One of these, a male of 48, who developed the condition in the left leg following trauma to the lower ankle, and in whom edema and fever persisted for several weeks, had a prompt return of temperature to normal and subsidence of edema after being placed in the Trendelenberg position and being given several injections of 2 cc. mercupurin intravenously. These prompt results may be expected more consistently in the acute types of thrombophlebitis of short duration, and probably not in the chronic forms. As a matter of fact, Ochsner and De Bakey suggest also[9] that their form of surgical treatment obtains better results in the early stages of thrombophlebitis. As stated previously, the increased protein content of long-standing edema may lead to fibrous tissue proliferation and fibrosis, with induration. It can hardly be expected that such edema will respond to any form of therapy. In fact, to the present time no adequate method has been found which is consistently good in the treatment of the edema of chronic thrombophlebitis.

5. Edema of the Arm Following Mastectomy. Case 10. L.C. (T.H. Med. No. N 2327). A single, white, retired school teacher of 59 had the right breast removed in May, 1939, because of a lump noticed two months previously. It was an adenocarcinoma. There were no axillary nodes. The menopause had occurred six years before. General physical examination was negative. A radical amputation with dissection of the axilla was carried out and upon recovery, edema developed in the right arm. It persisted and gave rise to moderate discomfort, some "clumsiness" and a consciousness of the cosmetic effect. When first seen February 15, 1940, for the purpose of administering a diuretic, the measurements of the arm were: right wrist 13.5 cm., (left 13.5 cm.), at the elbow 25.0 cm. (left 22.5 cm.), in the mid-arm 28.0 cm. (left 26.0 cm.) and the circumference at the axilla 29.0 cm. (left 27.0 cm.). She was then given 2 cc. mercupurin intravenously, allowed 1500 cc. fluid, and had an output of urine of 2750 cc. The measurements showed some improvement with the right elbow 24.5 cm., the mid-arm 27.5 cm. and the axilla 28.0 cm. in circumference. Subjectively the shoulder felt to be "less tense." A week later the same procedure was carried out, with an output of 2300 cc. and again decrease in size.

Case 11. R.K. (T.H. Med. No. K 1819). A white housewife of 34 had noticed a small lump in the right breast for two years, for which radical mastectomy and axillary dissection was carried out in September, 1936. An ovarian cyst had been removed in 1923, and six weeks before the mastectomy, a supracervical hysterectomy and bilateral salpingectomy had been performed for tubal pregnancy, uterine fibroids and endometriosis. It was at this time that the importance of the breast nodule was impressed upon the patient and its removal carried out later. The general physical examination was entirely negative, with normal heart and negative blood and urine. Edema had occurred and persisted since operation. February 20, 1940, three and a half years later, the right arm measured: at the wrist 14.75 cm. (left 14.0 cm.), mid-arm 27.0 cm. (left 23.0 cm.), and at the axilla 28.0 cm. (left 26.0 cm.). She was given 2 cc. mercupurin intravenously, with a fluid intake of 2000 cc., and she excreted 2050 cc. The arm measurements were the same after diuresis as before. A second attempt resulted also in failure.

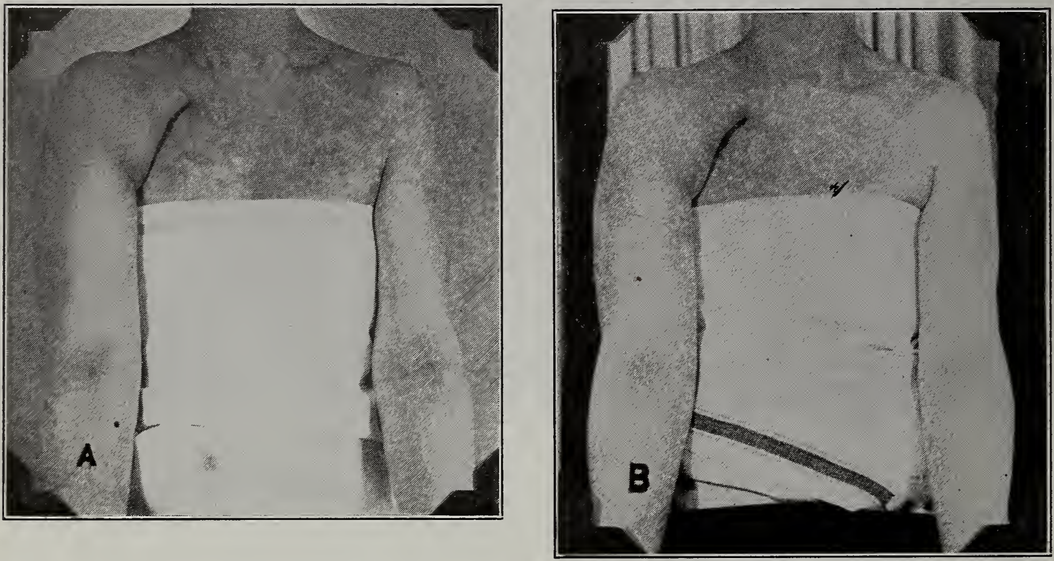

Fig. VI. Case 10. Edema of the arm following radical mastectomy (elephantiasis chirugica). A, before and B, after two injections 2cc. Mercupurin.

Edema of the arm following radical mastectomy is a worrisome complication to the surgeon, even with the best of surgical technique. Its etiology has been a source of controversy, but obstruction has been considered to be the main factor. Halstead[24] felt that infection, whether it could be found or not, with blocking

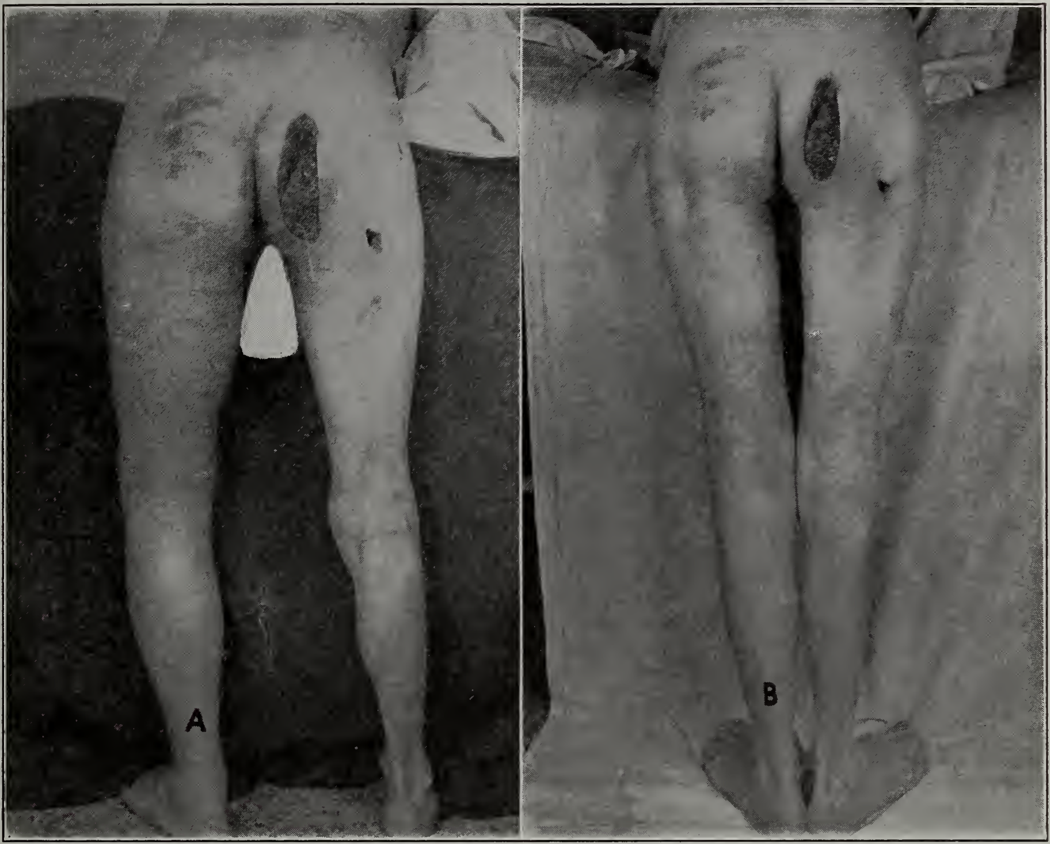

Fig. VII. Case 12, showing response of edema. A, before and B, after elevation only.

of lymphatics, was the chief cause. Homans[25] points out that such surgical elephantiasis appears to be related to destruction of the great collection of superficial lymphatics as they enter the axilla to join the deep perivascular lymph vessels. It does not appear to be related to invasion of lymphatics by tumor cells because the edema has been seen to follow removal of a breast for a mistaken diagnosis of cancer. According to Veal,[26] lymphatic obstruction accounts for only 10 per cent of the cases, venous obstruction occurring as a predominant feature in the remainder. Veal measured the venous pressure of the involved arm and found it to be elevated in all cases with edema. Patients without edema had no elevation of venous pressure. He feels it is not the actual sacrifice of venous tributaries at the time of operation but the later scarring of the tissues with further obstruction that is important in the edema production.

In the two cases of our series, the one responded satisfactorily, the other did not. The one that responded, Case 10, had had edema for about six months, whereas Case 11 had had edema for over three years. The explanation in Case 11 is probably on the same basis as discussed under thrombophlebitis, namely, fibrous tissue proliferation and fibrosis. Here, again, if mercurial diuretics are expected to produce results in these cases, they should be used early and continued intermittently.

6. **Edema of Undetermined Type.** Under certain circumstances an edema may be most difficult to classify as to the underlying pathology.

Case 12. H.C. (L.C.H. Med. No. P 1467). A white male of 52, who had been found on routine examination to have serologic evidence of syphilis, was begun on intramuscular bismuth. Following an injection into the right buttock, swelling, pain, and tenderness developed. This was treated with rest and heat but fluctuation developed for which he was admitted to the hospital April 8, 1940. Incision revealed an abscess of the deep muscular structures of the right buttock that had dissected to extend half way down the posterior aspect of the right thigh. The right thigh and leg were not swollen. Wide incision and drainage were carried out, but while at bed rest, rather marked edema developed to involve the entire left leg. No abnormality of the left leg could be determined. With elevation alone all the edema subsided, making any other treatment unnecessary. This case illustrates the fact that elevation alone may be all that is necessary, and this must be kept in mind in evaluating all types of therapy for local edema.

OTHER LOCALIZED EDEMAS

A few words may be said concerning the use of mercurial diuretics in the treatment of other forms of localized edema. In **cerebral edema** the results may not be good,[3] and its relief by lumbar puncture, when carefully done, allows also for diagnostic analysis. In one case, however, a female patient of 31 who had increased intracranial pressure with headache and choked discs, but without tumor as verified by ventriculogram, 2 cc. of mercupurin reduced the spinal fluid pressure from 250 mm. of water to 180 mm. with diuresis and marked relief of headache. The choking subsided after two more diureses, and improvement has continued for several months. No fluid was withdrawn in making the measurements. In **acute pulmonary edema** this method of treatment would be much too slow; in **chronic pulmonary edema**, however, the judicious use of salyrgan or mercupurin may increase the vital capacity and relieve dyspnea, as shown by Alsever and Levine.[27] In very occasional instances the fluid of a **pleural effusion** will respond to a mercurial diuretic. This is the exception rather than the rule. As with cerebral edema, it is simple and so much easier to remove the fluid by needle, which, here also, allows for analysis that is often helpful in determining the cause. In the case of **ascites**, either with cardiac failure, or with cirrhosis of the liver, the mercurial diuretics are successful occasionally in removing the fluid. When effective it presents two advantages: (1) To lessen the number of abdominal taps in keeping the patient comfortable; and (2) To preserve body protein, for abdominal paracentesis, particularly with cirrhosis of the liver, causes removal of sometimes large amounts of protein. In a series of 37 cases of cirrhosis of the liver reported by Fulton,[28] in only three cases can it be said that diuresis was immediately effective. Five others escaped tapping. The one beneficial effect observed was that in numerous instances tapping was delayed. This did not seem to effect the prolongation of life however.

AMMONIUM CHLORIDE WITH MERCUPURIN

Early in the use of the mercurial diuretics, particularly novasurol, Keith, Barrier, and Whelan[29] pointed out that an acid-salt, such as ammonium chloride or ammonium nitrate, enhanced the action of the diuretic. This has been substantiated many times, and that the enhanced effect is actually due to the acid state was shown by Ethridge, Myers, and Fulton.[30] The principle of using ammonium chloride before a mercurial diuretic has taken such hold with some physicians, that the writer has seen several instances where the doctor was of the impression that a mercurial diuretic could not be used unless preceded by ammonium chloride; or where the mercurial diuretic was withheld because the patient had gastric symptoms and could not tolerate ammonium chloride. In effect, we have all seen isolated instances where salyrgan or mercupurin alone produced a better diuresis than when combined with ammonium chloride. That ammonium chloride with salyrgan gives consistently better results there is no doubt, but to my knowledge no critical studies on this point have been carried out with mercupurin. That ammonium chloride may not be so essential when using mercupurin is suggesteed by the fact that the action of the acid salt, and the theophylline radical of mercupurin, are perhaps similar, namely, to cause an increase of glomercular filtration.

On this basis the mercupurin was given alone, 2 cc. intravenously, to all the patients in this series, and a very satisfactory clinical response was obtained in all except three instances, Cases 4, 7, and 11. In Cases 4 and 7, when ammonium chloride was instituted, followed in 48 hours by more mercupurin, the response was adequate. Although no critical comparative studies could be carried out in these cases, the impression was gained that mercupurin is successful frequently in the treatment of certain localized edemas without previous preparation of the patient with an acid-producing salt. It would seem rational, from this, in the treatment of localized edema with this drug, to administer it intravenously without preparation. If the first trial is unsuccessful, then to institute ammonium chloride, followed by a second injection of mercupurin. This procedure has the distinct advantage of probable success on the first injection, thus not having to delay two or three days to give ammonium chloride to a patient who is very edematous and who may need a diuretic drug promptly.

DISCUSSION

The evidence presented suggests that the mercurial diuretic, mercupurin, is effective in the treatment of certain localized edemas, particularly of the extremities. However, the results indicate also that the best effects are obtained when the diuresis is carried out early in the course of the edema. If edema of an arm or a leg, particularly with thrombophlebitis or following trauma or inflammation, is allowed to persist for weeks and months, there results an increased protein content of tissue fluid in the involved extremity, with fibrous tissue proliferation, fibrosis, and with a chronic indurated edema that may not respond to any form of therapy. Because of the increased tissue pressure and diminished nutrition occurring in an edematous extremity, an attempt should be made to control the edema. This may be done by elevating the part for several days to allow gravity to act, then injecting 2 cc. of mercupurin intravenously. This is to be given preferably in the early forenoon so that the diuresis will be completed before the patient wishes to sleep that night. If the first injection is unsuccessful, begin the patient on ammonium chloride, 15 grains (1.0 Gm.) four times a day for two or three days, then repeat the injection of 2 cc. mercupurin intravenously. If further injections are necessary for the control of the edema, they are to be given preferably at four to five day intervals for the best results. For some reason, with daily injections the patient often seems to become "refractory" and will not respond adequately to the drug. Of course, the general measures indicated in a given case are to be carried out also for the relief of the underlying cause of the edema.

Because these patients were not ill with chronic disease, they were not kept in the hospital for an extended period of time to determine the incidence of recurrence. The few individuals that have been followed had no recurrence, except Case 7, which responded to further injections of mercupurin. It is reasonable to believe, however, that recurrence of edema will take place in some instances, but it should respond to further injections of the drug.

None of the cases in this series showed any untoward effects from the intravenous injection of 2 cc. mercupurin.

Keeping the extremity free from edema should be helpful in an attack of the underlying cause of the edema, as well as aiding rather than hindering adequate circulation of the part for the promotion of healing.

SUMMARY AND CONCLUSIONS

On the basis that appreciable edema, as localized in an extremity, (1) is never beneficial to the patient; (2) is often uncomfortable during the course of the treatment of a patient; and (3) causes increased pressure in the tissues with diminished nutrition of the part, it would seem reasonable to attempt to control the edema.

Reports are lacking on the use of active diuretic agents in the treatment of edema localized in an extremity. Numerous surgical approaches in treatment are being advocated from time to time, but these are for chronic edema. During the acute and early stages of the edema, elevation, hot soaks, and hot packs have been the methods of choice.

A different approach to the treatment of extremity edema has been studied. The method consists in elevation of the part and the intravenous administration of mercupurin. All other local treatment was discarded.

Twelve cases of localized edema of an extremity are reported. These include obstructional, traumatic, inflammatory, and thrombophlebitic edema, and swelling of the arm following radical amputation of the breast (elephantiasis chirurgica). The cases were selected on the basis that cardiac or renal factors played no part in the cause of the edema. Eight of the 12 patients responded very satisfactorily to one or several injections of 2 cc. mercupurin intravenously alone. Two patients required acid-salt preparation with ammonium chloride, after which they responded fairly well to the mercurial diuretic. Another patient did not respond at all, which is explained probably by the chronicity of the edema with resulting induration. One patient had complete subsidence of edema by elevation alone of the part.

This method of treatment is so very simple and seems to be quite effective in the control of acute edema of an extremity, irrespective of the cause. The method consists in elevation of the extremity to allow the full effect of gravity, followed by the intravenous injection of a mercurial diuretic, either salyrgan or mercupurin.

Ammonium chloride has been shown to be a distinct adjunct in the use of salyrgan. In this study it was observed that with mercupurin (salyrgan with theophylline) a satisfactory diuretic response could be obtained frequently without the preliminary administration of ammonium chloride.

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Diagnosis of Early Pulmonary Tuberculosis

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FOR many years both medical and lay organizations have consistently emphasized the importance of the diagnosis of early pulmonary tuberculosis. Little progress has been made, however, for the recent American Medical Association survey of tuberculosis institutions in this country revealed that, during the year 1938, of the 80,088 patients admitted with the adult type of tuberculosis, 87 per cent were already in the advanced stages (55 per cent far advanced and 32 per cent moderately advanced) and but 13 per cent in the minimal or early stages of the disease.[12] Despite the large sums of money which have been expended in early diagnosis campaigns and in the education of the public, the vast majority of our tuberculosis patients are still permitted to reach the advanced stages of the disease in which recovery is either impossible, or is to be attained only with difficulty through prolonged rest and the application of numerous collapse measures.

The failure of our efforts to discover tuberculosis in its easily curable and non-infectious stage is due largely to the persistence of certain concepts of the disease to which many physicians still adhere. These now require revision, for the more intensive use of the X-ray during the past ten years has given us a much clearer understanding of the nature of early pulmonary tuberculosis.

THE VALUE OF SYMPTOMS

The first of these older concepts has been the assumption that the public could be educated sufficiently to recognize the symptoms of tuberculosis, and hence seek the physician's advice early in the course of the disease. Modern roentgenologic investigations, however, have shown us the fallacy of this assumption, and the impossibility of finding any large number of early cases through any program which waits for the tuberculous individual to seek medical attention.

The classical descriptions of pulmonary tuberculosis with which we are all familiar picture it as a disease of easily recognizable signs and symptoms. That these occur is obviously true, but the really significant point which textbooks of medicine have never sufficiently stressed is the fact that the signs and symptoms of tuberculosis are characteristic only of its later stages. The clinical history which the physician elicits may thus be completely misinforming, for to await the onset of symptoms in order to suspect tuberculosis is to acknowledge that the patient has probably already progressed beyond the early phases of his disease. Esmond Long[7] has pointed out that "what is commonly called its onset (of tuberculosis), the symptom complex characterized by cough, fever, and night sweats, is not the onset but a stage of active progression". In short, therefore, the presence of the symptoms of tuberculosis usually indicates the presence of advanced disease.

On the other hand, really early pulmonary tuberculosis is a silent disease, lacking either signs or symptoms by means of which it may be recognized with any degree of facility. Experienced tuberculosis physicians know that the majority of individuals with minimal tuberculous lesions, and even many with very extensive lesions, remain completely unaware of their presence for considerable periods of time because of the lack of noticeable symptoms to arouse the suspicion either of the patient or of his physician.

Numerous observers have corroborated the validity of these statements. For example, Fellows and Ordway,[5] in 244 individuals with a diagnosis of clinically significant tuberculosis, found that "67 per cent had either no symptoms or one so vague that it had aroused no interest, curiosity, or apprehension at the time of diagnosis". Boynton, Diehl, and Shepard,[3] in a tuberculosis case-finding program in university students, noted symptoms of cough, weight loss, and fatigue in but 36 per cent of the individuals with incipient disease. Amberson,[1] from an extensive experience in surveys of various groups in New York City, noted that "an important reason for not finding early tuberculosis is that 60 to 70 per cent of the people do not develop an aware-

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Read before General Session, Ohio State Medical Association, at the Ninety-Fourth Annual Meeting, Cincinnati, Ohio, May 15, 1940.

ness of ill health until the disease has entered its moderately advanced or far advanced stage". During the past five years in our work in the tuberculosis service of Cleveland City Hospital we have encountered 27 members of the personnel with minimal tuberculous lesions. Of this number 26 were entirely asymptomatic and considered themselves in good health at the time the diagnosis was established. One individual had such mild symptoms that she would probably have gone undetected had she not been employed in a tuberculosis institution.

The silent character of pulmonary tuberculosis is furthermore strikingly illustrated in the following example:

Case 1. An intelligent physician developed a tuberculous pleurisy with effusion for which he cured in a sanatorium for eight months. He was then a member of the professional staff of the institution for two years during which time he became intimately acquainted with every aspect of the disease. Later he resumed the private practice of medicine; and during the next year numerous follow-up examinations revealed no evidence of active tuberculosis. He then developed a severe "cold" which incapacitated him for five days. He apparently recovered fully and resumed his ordinary duties. One month later, however, because of a slight pain in the left upper chest, an X-ray check-up was thought desirable; although he had gained weight and felt himself in his usual good health. The radiograph revealed moderately advanced tuberculosis with infiltration in the upper third of the left lung and a 2½ cm. cavity under the left clavicle.

If an intelligent physician trained in tuberculosis remains unaware of the presence of his disease until it has reached the stage of cavitation, we should realize the futility of attempting the education of an uninformed public. It must be clearly recognized that the very nature of the disease itself stands as a fundamental obstacle to the discovery of incipient tuberculosis, for its asymptomatic character effectively prevents tuberculous individuals from seeking early medical attention. The only logical conclusion which can be reached, therefore, is that, to discover early tuberculosis, the physician himself must seek the unsuspecting patient among those individuals who are apparently healthy.

THE VALUE OF PHYSICAL EXAMINATION

The second concept responsible for our failure to discover early tuberculosis has been the traditional teaching that physical examination of the chest is sufficiently accurate to permit the physician to readily detect tuberculosis by such examination alone. The belief that significant tuberculosis cannot exist without physical signs is erroneous, however, for there is ample evidence that even the most skillful physical examination will miss the majority of early cases, and even an appreciable number of advanced lesions. Numerous factors contribute to the inaccuracy of the physical diagnosis of early tuberculosis. The character of the lesion, a relatively small area of involvement, a localization of the disease away from the extreme periphery of the lung so that it is surrounded by healthy lung parenchyma, the presence of complicating factors such as emphysema, may all render a tuberculous lesion silent and undetectable by the ordinary methods of percussion and auscultation.

Bloch,[2] for example, has stated that more than "one-third of all cases of clinically important pulmonary disease are missed on physical examination". Sampson and Brown,[8] in a study of 280 patients with minimal pulmonary tuberculosis, found that only "27 per cent had rales by means of which the disease could be recognized". Taylor[9] noted that physical examination would have detected but 22 per cent of his minimal cases. Boynton, Diehl, and Shepard[3] found positive physical findings in but 9.7 per cent of students with minimal disease. Fellows and Ordway[5] reported an absence of physical signs in 64 per cent of 244 employees with clinically significant pulmonary tuberculosis.

No physician would deny that physical examination is a diagnostic method of fundamental importance. Nevertheless, it is equally important to emphasize the very serious limitations of the method in the diagnosis of pulmonary tuberculosis. Physicians who consider themselves adept physical diagnosticians will undoubtedly be reluctant to accept a fact which is now well known to experienced tuberculosis men, that physical examination is of practically no value in the recognition of early tuberculous lesions. Surely we can place little reliance on a diagnostic procedure so inaccurate that it will miss at least two out of every three patients in the early stages of their disease, and at least one out of every three in the advanced stages. To inculcate in the mind of the physician the belief that his examination of the chest will detect early pulmonary tuberculosis is to do both him and his patient an injustice, for this is clearly impossible except in the case of a few fortunate patients. It can be stated unequivocally, therefore, that a negative physical examination is of no signficance, for pulmonary tuberculosis can never be excluded by the mere absence of physical signs.

THE VALUE OF X-RAY EXAMINATION

Despite the inability of the physician to rely upon either symptoms or physical signs for the recognition of early tuberculosis, he does possess a diagnostic procedure by means of which this may be accomplished. Practically all authorities on tuberculosis now concede that the X-ray is the most efficient and accurate method available for the diagnosis of early tuberculosis. Compared with the ordinary methods of clinical investigation the superiority of the X-ray must go unchallenged for, while the history and physical examination will find the occasional patient, roentgenologic studies will reveal nearly 100 per cent of early cases. In the light of this knowledge the following diagnostic rule is sound, that no physician today is ever justified in excluding tuberculosis without first securing an X-ray film of the chest.

Of great importance is the fact that our roentgenologic studies have for the first time given us a really adequate conception of what is meant by the term, early pulmonary tuberculosis. In the past, physicians have been content with their diagnostic efforts if they succeeded in detecting the disease while the pulmonary symptoms were still mild and the physical signs still minimal, even though extensive areas of lung parenchyma had become involved. Today this no longer satisfies us, for the X-ray shows us that it "will reveal the lesions of pulmonary tuberculosis long before they are manifested in any other way".[4] It is the X-ray which has given us the ability to find tuberculosis while it is still a lesion of very slight extent without significant caseation or cavity formation; and in that initial silent period in which the patient himself is unaware of symptoms and even the most conscientious and skillful physician incapable of detecting physical signs. Early or "pre-symptom" tuberculosis is, therefore, essentially a roentgenologic diagnosis. Because in this stage the disease is silent, it can now be readily understood why the fact is emphasized that the discovery of early tuberculosis depends largely on the routine roentgen examination of apparently healthy individuals.

To attribute to the X-ray this outstanding role is not to disparage the use of the clinical history and physical examination, but to establish a more correct perspective in the recognition of the fact that these latter procedures have but a very limited application in the diagnosis of early pulmonary tuberculosis.

The advantages of finding pre-symptom tuberculosis are obvious. To the patient it means the detection of his disease in a curable stage before irreparable damage to the lung has occurred. To the community it means the isolation and treatment of the tuberculous while they are still non-infectious. The isolation of the "open" case of tuberculosis is always worthwhile, but the detection of the patient before he has had any opportunity to infect healthy individuals is to make a real advance in the eventual control of the disease.

In our work at Cleveland City Hospital we have had the opportunity of demonstrating the feasibility of finding pre-symptom tuberculosis by routine X-ray examinations. During the past six years it has been our practice in the Tuberculosis Pavilion to secure a chest film on every new employee, and then to regularly re-examine the entire personnel fluoroscopically every three months, regardless of the presence or absence of symptoms. In the General Hospital, however, examination was undertaken only if symptoms of tuberculosis developed and were noted by members of the personnel. During 1934 to 1939 inclusive, tuberculosis was detected in 29 employees of the Tuberculosis Pavilion and in 19 employees of the General Hospital (Table 1). In the former group, examined routinely, no individual had developed more than a minimal parenchymal lesion at the time the diagnosis was made. In the General Hospital group, on the other hand, nearly one-half (47 per cent) of the employees had already reached the advanced stages of the disease when they first presented themselves for examination.

Table I

Tuberculosis in the Hospital Personnel 1934-1939

	Total	Minimal	Moderately & Far Advanced	Pleural Effusion
Tuberculosis Pavilion	29	27 (93%)	0	2 (7%)
General Hospital	19	7 (37%)	9 (47%)	3 (16%)

Another significant point was the fact that of the seven employees of the General Hospital whose disease was minimal, six were examined because of pulmonary hemorrhage and one because he was a known contact of a tuberculous brother. On the other hand, of the 27 Tuberculosis Pavilion employees with minimal disease, 26 were entirely asymptomatic and considered themselves in good health when the diagnosis was made. In the remaining case the only symptom was that of a mild pleurisy. Such a demonstration clearly illustrates the efficacy of routine X-ray studies in detecting early tuberculosis in apparently healthy people; as contrasted with the results of the prevalent practice of waiting for tuberculous individuals to seek medical attention.*

The choice of roentgen method to be used in such routine studies cannot be discussed at length here. The celluloid film is the most accurate and is generally preferred if expense is no deterrent. In a survey of large groups the less expensive paper film may prove satisfactory, particularly if the technical work is performed by experienced individuals. Recently methods have been developed for direct photography of the fluoroscopic image on 35 mm. or 4x5 inch film. As yet, experience with this method is insufficient to permit any statement concerning its future applicability.

For many years tuberculosis physicians have devoted considerable attention to the use of the fluoroscope in the detection of early tuberculosis and there are now many studies indicating that it may be employed effectively.[2] There has been some misunderstanding on the part of roentgenologists concerning the use of the fluoroscope in the diagnosis of early tuberculosis and many have condemned it vigorously.[6,10] No claim is made, however, that the fluoroscope reaches the accuracy of the X-ray film, but if used with discrimination it provides an acceptable and very economical substitute. The fluoroscope may be utilized safely if four criteria are met: (1) the use of a contrast screen such as the Patterson Type B, (2) proper adjustment of the eyes to the dark room which usually requires 15 to 20 minutes, (3) experience on the part of the examiner with the fluoroscope and with tuberculosis, (4) easily available X-ray facilities so that all suspicious findings may be checked with films, inasmuch as a final diagnosis is rarely made from the fluoroscopic study alone. With the knowledge that the fluoroscope has certain limitations we have employed it with great satisfaction for six years; and have found it an invaluable instrument in the detection of early tuberculosis in our sanatorium personnel.

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*The nature of early tuberculosis was demonstrated by numerous X-ray films which are not reproduced here.

GROUP EXAMINATIONS

It is now possible to make a very practical application of our knowledge concerning the nature and behavior of early tuberculosis.

We know that tuberculosis is concentrated principally in certain groups of our population, instead of being widely disseminated in all classes of society as was true 30 or 40 years ago. Obviously the most effective method of finding large numbers of early cases would be through the repeated roentgen examination of those groups in which the disease is most prevalent. Particularly important would be the study of:

Household Contacts: The most likely source of tuberculosis is contact with known cases of tuberculosis. Stewart and his co-workers[13] have shown that within a ten-year period following exposure to an "open" case in the home 10 per cent of the contacts will have developed the disease. The private physician thus has the responsibility of seeing that the contacts of his tuberculous patients are protected by routine examinations. To be effective this must consist of the use of the X-ray or one of its modifications at least once, and preferably twice, or even three times a year for a minimum of five years, since neither the clinical history or the physical examination of the contact will be of any material value.

Relief and W.P.A.: Tuberculosis is essentially a disease of the lower economic strata of our society and the examination of this group should yield a high incidence of active cases. This has already been demonstrated in New York City where, during the past four years, more than 100,000 persons receiving some form of public assistance have had X-ray films made of their chests. In this group an incidence of 2.3 per cent was found, more than twice the incidence for the general population. In certain groups, such as homeless men, the high figure of 5.3 per cent was reached.[11] Since to a great extent our negro population falls within the lower economic strata, their examination is also indicated.

Industrial Workers: Such individuals are easily accessible; and since most unskilled industrial workers come from the economic groups in which tuberculosis is prevalent, their examination should yield an appreciable number of early cases. Industrial physicians can contribute a valuable service to the community by pointing out to employees and employers alike the benefits of routine X-ray studies. This is particularly important in the silica-exposure industries in which tuberculosis is a special hazard.

Nurses and Other Hospital Personnel: The high incidence of tuberculosis in nurses, both in general hospitals and in sanatoriums, has received considerable publicity during the past ten years. Physicians on hospital staffs should be alert to call to the attention of hospital administrators and nursing superintendents the advantages of routine X-ray examination, both for the protection of the hospital personnel and of the patients.

High School and College Students: The high incidence and seriousness of tuberculosis in the adolescent ages make this an important group to be studied. School physicians are now becoming aware of the fact that routine X-ray or fluoroscopic examinations provide a more efficient and less costly method of case finding than the more cumbersome tuberculin testing, particularly in communities in which the incidence of positive reactors remains high.

Other groups which could be studied profitably are school teachers, food handlers, and women attending pre-natal clinics.

To a considerable extent such routine group examinations of apparently healthy people are the problem of the public health agencies. Nevertheless, an understanding by physicians of the principles involved should materially assist public health authorities in the fulfillment of such a program. In addition, the industrial physician, the school physician and the hospital physician may also play a valuable role within their own spheres of influence.

It must be granted that the private physician in his own practice is seriously handicapped in detecting early tuberculosis, for the present cost of roentgenograms effectively prevents the use of any large number of X-ray examinations, except in those patients with obvious symptoms. A few well-trained physicians have been able to utilize the fluoroscope effectively, but the majority of physicians cannot even employ this procedure. Nevertheless, the private physician can make a real contribution through the proper management of the household contacts of his tuberculous patients. Under any circumstances, he should have a clear understanding of the nature of early tuberculosis. Only then will he be sufficiently alert to utilize roentgen examinations whenever feasible, instead of relying upon methods which we now know are ineffective in the diagnosis of early pulmonary tuberculosis.

SUMMARY

1. Early pulmonary tuberculosis is characteristically a silent disease lacking either signs or symptoms by means of which it may be easily recognized. The vast majority of patients reach the advanced stages of the disease before they become aware of symptoms.

2. Physical examination is of practically no value in the diagnosis of early tuberculosis. The presence of an early lesion can never be excluded by the inability to demonstrate physical signs.

3. The X-ray is the only accurate method available for the diagnosis of early tuberculosis. It will reveal slight lesions long before either symptoms or physical signs become evident.

4. Because early tuberculosis is a silent disease, it can be discovered only if the physician himself seeks the unsuspecting patient through the routine roentgen examination of apparently healthy individuals.

5. This can be accomplished in a practical manner through the repeated study of those groups in the population in which tuberculosis is most prevalent.

6. The diagnosis of early, pre-symptom tuberculosis is important both to the patient and to the community, for it means the detection of the disease in its curable and non-infectious stage.

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Cancer of the Ovary

One of the discouraging cancers in the woman is that of the ovary. We have learned, however, that many ovarian tumors, formerly called malignant, in reality are benign. These tumors cannot be distinguished clinically in the early stages when if they are malignant cure may be effected. We must rely on detecting enlargements of the ovary by repeated pelvic examinations in the cancer age. The public is coming to us in greater numbers than ever before for annual physical examinations, and every practitioner and gynecologist has many women who, because of a mild cancer phobia, come for regular pelvic examination. It is common practice for the gynecologist to record his objective findings, a habit that I commend strongly to the general practitioner if he does not do it already. It is desirable at times to appreciate that an enlarged ovary is actually growing according to the objective records. Cancer of the ovary is often slow in growing and should be more often cured. We must even be prepared to operate unnecessarily to catch the occasionaly early malignant tumor, for, as Schiller has pointed out, it appears likely that ovarian carcinoma does not start as a small group of malignant cells but rather occurs as a malignant transformation of neoplasm which hitherto had been benign. This concept indicates the need of prophylactic removal of ovarian growths in much the same manner that the surgeon must prophylactically remove adenomas of the thyroid.—James Raglan Miller, M.D., Hartford, Conn.; N.Y.S. Jour. of Med., Vol. 41, No. 5, March 1, 1941.

The weight gain throughout pregnancy should not exceed 25 pounds. The rate of gain is more significant, however, and if excessive will give early evidence of the retention of fluid and a disturbed metabolism. A normal gain in weight is never more than one and one-half pounds per week and is produced either by too great a caloric intake or fluid retention. This weight gain usually precedes the development of clinical edema and is therefore more valuable evidence of the beginning of toxemia.—Carl P. Huber, M.D., Indianapolis, Ind.; Neb. S. M. Jour., Vol. 26, No. 3, March, 1941.

A Technique for Cholecystectomy

M. E. BLAHD, M.D. (deceased) and WILLIAM MENDELSOHN, M.D.

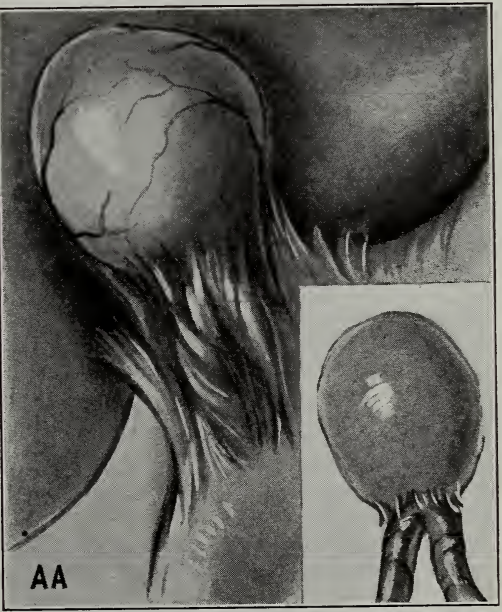
A SIMPLIFIED method is herewith described which completely safeguards the hepatic and common bile ducts in cholecystectomy. The ever increasing trend toward performing cholecystectomy during the acute stage of gallbladder disease makes such a method more than ever desirable, and is the chief reason for publishing our technique at this time. Curiously, injuries to the common and hepatic ducts occur most often in the so-called "interval" operation. On the other hand, during operations in the acute stages of the disease, when the gallbladder and the hepatico duodeno ligament are inflamed, swollen, edematous and even gangrenous, injuries are not nearly so frequent. Although this fact may seem paradoxical, nevertheless, the reason is obvious, since, in removing the acutely inflamed gallbladder, the operator religiously avoids the region of the hepatic and common ducts. On account of a swollen and edematous duodeno hepatic ligament, he is perfectly satisfied to sever the cystic artery and duct at the neck of the gallbladder, and from sheer necessity, to perform the operation in a plane higher than usual, a plane in which the duodeno hepatic ligament and its contained structure are safe from injury.

In the face of the well nigh universal opinion that the only way to avoid injury to the deeper bile passages is to isolate and identify each one of these structures, a method which completely ignores them, seems like medical heresy. Nevertheless, the fact remains that the very technique which is supposed to guard these structures from accidental harm, is by its very nature, responsible for their all-too-frequent injury. For it is during the dissection entailed for the isolation and identification of these structures that they are injured; the injury frequently going unnoticed by either the operator or his assistants. If, on the other hand, the operation is performed without permitting these important structures to enter the operative field, their safety can be assured. Every surgeon has at times been compelled to remove the gallbladder when, due to extensive inflammation or other reasons, it would have been too hazardous to dissect the cystic artery and the bile ducts. Rather than risk injury to these important structures and believing "discretion to be the better part of valor," he contents himself with the removal of the gallbladder at its neck, and lets it go at that. In other words, he removes the gallbladder above the niveau of the deeper bile passages, at a level which we have termed the "safety plane."

When the numerous anatomical variations of the cystic artery, the hepatic artery, the cystic, hepatic, and common ducts are taken into consideration, it is surprising that while we are trying to isolate these structures for identification, they are not more frequently injured. Even the most skilled will run into difficulties in trying to unravel this complex relationship. A glance at the accompanying illustrations will show the complexity of this structural relationship more clearly than could the most minute description.

The Authors

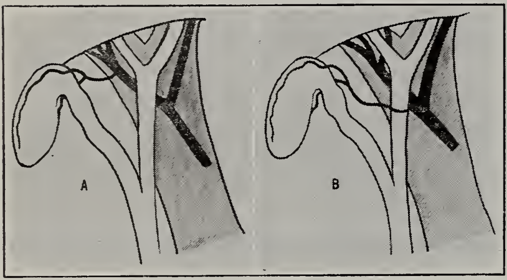
- **Dr. Blahd**, Cleveland, Ohio, graduate of Western Reserve University School of Medicine, 1906; member American College of Surgeons; surgeon-in-charge, Mt. Sinai Hospital, Cleveland, Ohio; died February 28, 1940.
- **Dr. Mendelsohn**, New Haven, Connecticut, is a graduate of Johns Hopkins University School of Medicine, 1933; member Sigma Xi, Alpha Omega Alpha; assistant attending surgeon, Grace Hospital, and New Haven Hospitals; clinical instructor in surgery, Yale Medical School.



AA—The Neck of the Gallbladder concealed by an adherent Common Duct.

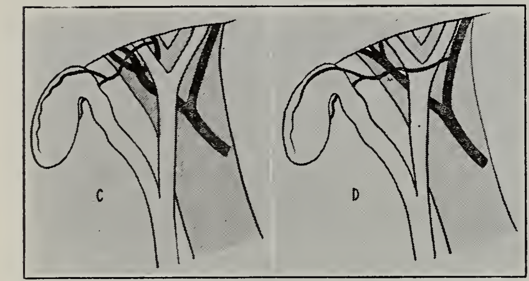
Submitted October 1, 1940.

There is one point in this anatomical jig-saw puzzle which never varies and is absolutely constant. We refer to the point at which the cystic artery meets the gallbladder. This point is always situated on the posterior surface of the gallbladder at the most distal portion of its neck. It is above the plane of the deeper bile passages, and, in spite of the numerous anatomical variations of these structures, the hepatic and common ducts are never normally in contact with this point. Very rarely, however, these ducts are drawn up by inflammatory adhesions in such a manner that they completely obscure the neck of the gallbladder. This constitutes the only exception to the above statement and is easily recognized by any one who is at all qualified to do gallbladder surgery.



A—Cystic Artery arises from the right branch of the Hepatic Artery, crossing the Hepatic Duct at right angles.

B—Characteristic identifying vessels on Common Duct Wall. (Jackson: S. G. O. Vol. LXVII, No. VI.)



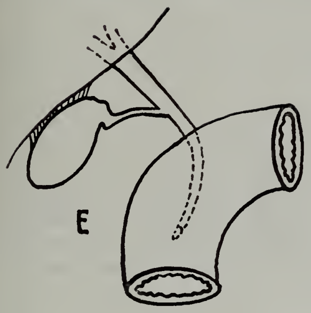
C—Cystic Artery arises from the right branch of Hepatic Artery and forms a loop around the Hepatic Duct.

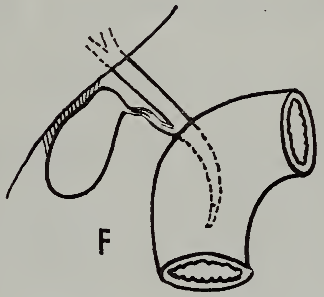
D—Cystic Artery arises from left Hepatic Branch and crosses the main Hepatic Duct. (Descombs—Chirurgie der Gallenwege. H. Kehr.)

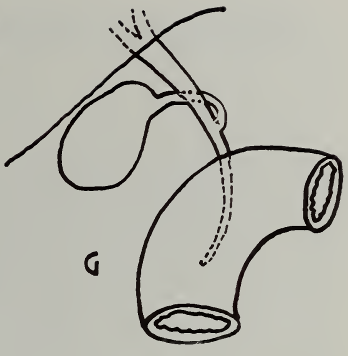
The technique which we are about to describe is most simple, since it depends for its success on identification of the neck of the gallbladder. As a rule this is accomplished quite easily, and only when this portion of the gallbladder is concealed by neighboring structures drawn there by adhesion, are there any difficulties. Even then, a few gentle thrusts with a moist sponge will suffice to push these invading structures out of harm's way.

After the gallbladder has been properly exposed and the surrouding viscera walled off with moist tapes, the fundus of the gallbladder is grasped with a ring forceps and a second forceps is applied to Hartman's pouch. Moderate traction is then applied to both forceps, bringing the neck of the gallbladder and the beginning of the cystic duct, surrounded by the fatty tissue of the uppermost portion of the hepatico duodenal ligament, into view. Dissection of the cystic duct is hardly ever necessary, as it can be readily recognized as the direct continuation of the gallbladder. However, when the hepatic and common ducts obscure the junction of the gallbladder and the cystic duct, these obscuring organs must be pushed away with a moist sponge, in order that the neck of the gallbladder may be exposed. This, however, is a most rare occurrence. A Moynihan clamp is then placed on the uppermost portion of the gallbladder in such manner that all the tissue between the gallbladder and its liver bed is grasped in the bite of the forceps. This maneuver will include the cystic artery. A second forceps is similarly placed above the first one, and the cystic duct and artery divided between the two. Occasionally it is impossible to include all the fatty areolar tissue in the grasp of one forceps, and since the remaining tissue may contain the cystic artery, it must be clamped separately. As a rule, ligation of the clamped tissue presents little difficulty, since the tissue to be ligated is generally close to the skin level and not in the depths of the wound. A penrose drain is inserted to the ligated stump.

Theoretically, there are two objections to the above described procedure: First, that the operation is contrary to recognized surgical principles; and second, that the cystic duct may dilate, simulate a secondary gallbladder, and again give rise to the identical symptoms for which the patient sought relief. Regarding the first objection, we should like to direct the reader's attention to similar objections raised against subtotal thyroidectomy as it is now performed. Here too, it was deemed necessary to adhere to surgical principles, and at least on one side, do complete lobectomy. Isolation and identification of the parathyroids and even the recurrent laryngeal nerve was considered essential and was attempted. In spite of all these precautions, hoarseness and tetany were common occurrences. It took much patience to convince the profession that the very method which they were using to protect the parathyroids and the recurrent nerve was, as a matter of fact, the cause of their injury; and further, that there is only one way to keep these important structures from harm, that is to permit the lateral and posterior thyroid capsule to remain and thus keep them out of the field of operation. In other words, the gland is resected in a different plane from that which contains the parathyroids and the recurrent nerve. Since the adoption of the intra-capsular opera-







E—The Cystic Duct joins the common duct at right angles. This relationship existed fourteen times in forty-three cases.

F—The cystic duct parallels the Hepatic Duct. This relationship occurred thirteen times in forty-three cases.

G—The cystic duct winds around the Hepatic duct spirally. This relationship occurred sixteen times in forty-three cases.

(Ruge—Chirurgie der Gallenwege. H. Kehr.)

tion, tetany and vocal cord paralysis have decreased almost to the vanishing point.

Today, in the case of cholecystectomy, there exists an identical situation. The very method which we employ to protect the ducts is the one which causes their injury. If we take to heart the lessons learned from our experience with thyroidectomy, it should be comparatively easy to switch to the more conservative operation in the case of cholecystectomy. Certainly, the fact that the herewith recommended operation is considered unsurgical, is not a valid objection and should not stand in the way of our putting it into practice. Many hepatic and common ducts and even lives will be saved when we learn to discontinue unnecessary dissection of these structures.

The second objection, concerning the subsequent dilation of the remaining portion of gallbladder and cystic duct with recurrence of gallbadder symptoms, is apparently more theoretical than real. There is very little in medical literature to support such a contention. There are, however, isolated reports. It is quite possible that when this occurs, a considerable portion of gallbladder was permitted to remain. In our own experience, we have yet to see a single case of this complication. In a number of instances where we had done cholecystectomy according to the herein described method, one of us (M. E. B.), at a secondary operation, was able to check the original operative field. In no instance was he able to identify the cystic duct. This structure had been completely obliterated and had been converted into a lumenless, innocuous, fibrous band.

We have used this method of cholecystectomy for more than 30 years. Now, as we look back over our many cases, we find that our results are more than satisfactory, that our mortality is extremely low, and that in all these cases neither the hepatic nor common duct was involved in a single accident. Therefore, the time has come, when with clear conscience, we can wholeheartedly recommend this method as one which we have tried and not found wanting. As far as we know, this is the first time this technique for cholecystectomy has been published. If however, anyone has antedated us, we willingly grant him priority.

An Easy Method of Inspecting the Upper Angle of the Conjunctiva

The conjunctiva lying in the cul-de-sac formed by the upper lid at the upper rim of the orbit, where it approximates the globe, is notoriously hard to examine, especially if the tissues are acutely edematous. From a position a little to the side and in front of the patient, and with a light at the level of the examiner's own eye, the patient is asked to look down. With the thumb and forefinger of the right hand, the eyelashes of the upper eyelid are grapsed and the lid is pulled downward and away from the globe. The thumb of the left hand is now used to press into the skin just above the upper edge of the tarsus, and just below the eyebrow, and to slide and pull this tissue upward over the upper rim of the orbit, toward the forehead. Now looking up and under the lid, it will be seen that the cul-de-sac has been stretched so that it may be easily inspected. With practice, it will be found that the whole maneuver can be executed with one hand, using the second finger to raise the eyebrow, leaving the other hand free for treating the area.

Subcutaneous connective tissue bands extending throughout the substance of the lid enable this traction to act, although there is no continuous anatomical structure in the lid which would account for the phenomenon. The bands are apparent upon attempting to dissect the lids by layers.—E. R. Hargett, M.D., Springfield, Ohio.

Sub-Acute Bacterial Endocarditis: With Case Report

PAUL C. COLEGROVE, M.D.

The Author

◐ Dr. Colgrove, Oberlin, Ohio, is a graduate of Iowa State University College of Medicine. 1913; fellow American Medical Association: member of staff of Allen Memorial Hospital, Oberlin, Ohio.

Personal History—White, male, aged 33. Pale, active man of about stated age. At the age of 10 this patient had an attack of rheumatic fever following acute tonsillitis. The mitral and aortic valves were damaged as the result of the infection. After a prolonged rest in bed he seemed to fully recover his strength. However throughout his youth and growing manhood he was repeatedly warned that he had a "weak heart". This kept him out of athletics, except for golf, which he played often and without any apparent ill effect. At the age of 25 years, regardless of his rheumatic heart he was accepted for a life insurance policy.

He had the usual childhood diseases but other than these he was unusually well and apparently healthy. His tonsils were removed when he was 12 years old.

Family History—Father died of apoplexy about four years ago. Mother alive and well except for partial deafness. No brothers or sisters.

Present Illness—Began rather insiduously the early part of April, 1938. This illness began so slowly that the patient could not fix the exact time of its beginning. He consulted me on April 14, 1938, with the remark that he felt first rate, but he noticed that in the evenings for the past several days his temperature would rise to between 99.5 to 100.5 but by bedtime it would be down to normal. He stated that exercise seemed to have little effect on the temperature. He would play golf and have no higher rise of temperature than if he sat in the house and read. He could not say how long this slight irregular fever had been coming on. Throughout the day his temperature was normal.

On physical examination on April 14, a greatly enlarged rheumatic heart was found with loud murmur over apex and base. The blood pressure was: systolic, 148; diastolic, 98. The chest X-ray showed no pulmonary tuberculosis; the Manteaux skin test was negative and the undulant fever blood and cutaneous tests were repeatedly found to be negative. Feces and urine also negative. The blood examination showed a slight degree of anemia, the hemoglobin was 78 per cent, the white blood count 14,200 and the red blood count 4,000,000.

He was given iron citrate, liver extract and a full protein diet. He was advised to moderate his physical activities and instructed to keep a temperature chart and report again in two weeks.

On May 1, approximately two weeks later he reported and said that he still had the fever and that he felt some weakness and fatigue in the late afternoons, also that he had had two nosebleeds and had some pain in his abdomen. The physical examination was again essentially negative and his blood pressure remained about the same. On going over with him again his past history he told me he had had a tooth extracted along in March, 1938. The undulant fever tests were again done and found to be negative.

During these two weeks he had played golf about two or three times a week without any undue signs of fatigue. He was told to limit his exercise to almost nothing and to continue with his temperature record, also to continue the iron and liver therapy.

He reported on May 20. At this time his temperature chart had shown a gradual rise from 99.5-100.5 to 101-102 and he had more muscular weakness and at times attacks of dyspnoea and night sweats. On examination it was noticed that the pulses were more dancing than before and in spite of his liver and iron his anemia was progressing, the hemoglobin, 72 per cent; white count, 13,200; red blood count, 3,650,000. A blood culture was taken which was negative. He was instructed to go to bed for at least 10 days. This he refused to do as he said he felt very well until 4:00 p.m. when his temperature would start to rise.

About June 1 another blood culture was taken and found to be negative. However, on this date he was put to bed at his home and finally a blood culture was found positive for hemolytic streptococcus. Two more blood cultures were taken and sent to different laboratories and both reports were positive to streptococcus viridans. Why the earliest blood cultures did not show streptococcus viridans has been a mystery to me.

On July 7, after being at home in bed about a month, he was admitted to Allen Hospital. During his three weeks bed care at home he had developed several new physical signs. His physical examination on entrance is as follows:

Entrance Complaint—Chills, fever, dyspnoea, nose bleeds, muscular weakness and general malaise.

Physical Examination—White, male, aged 33, pale, waxy, toxic looking man of about stated age.

Eyes—Negative.

Mouth—Tongue coated. Mucus membrane pale color. Pharynx negative. Teeth show considerable dental work.

Skin—Few petechial hemorrhages in the skin and one small hemorrhage in sclera of right eye.

Neck—No enlargement of thyroid. Dancing pulses easily seen and felt above each clavicle.

Thorax—Negative. A few large moist rales heard along the base of both lungs posteriorly.

Heart—Greatly enlarged. P.M.I. in the sixth I.C.S. 2½ inches outside of left nipple line. Loud blowing systolic and pre-systolic murmur heard over entire precordial region. Pulses water

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Submitted October 10, 1940.

hammer type, dancing quality. Blood pressure. Systolic 152, Diastolic 98.

Abdomen—Slightly distended but not tender to palpation. Lower border of liver easily felt below right costal margin. Spleen also palpable and quite enlarged.

Extremities—No oedema, slight digital tremor. Reflexes 2-plus. On small finger of right hand was distinct splinter hemorrhage under the nail. Some muscular soreness present.

Laboratory Examinations—Sedimentation rate level 30. Urinalysis, negative. Blood: Hemoglobin 74 per cent, white blood count 6,250; red blood count 3,600,000.

The Treatment—Rest in bed, ice bags to precordia. Sulfanilamide, grs., 80 per day; sedative for sleep; liver extract 1cc. (hypodermic) every two days; iron citrate; high caloric diet; vitamins A, B and C (it was found by 24 hour urine specimen examination that his vitamin C was being excreted 170 mgm. per 24 hours in spite of the large doses of C vitamin given). Ascorbic acid, 200 mg.

Nothing that was done could check the course of this disease. The temperature ran in daily spikes with remissions in the mornings. The pulse was not above 100 but became very dancing and water hammer in character. His anemia progressed until the hemoglobin was 40 per cent and the red blood count was 2,860,000. His condition became more and more grave until on the 28th day after admission to the hospital he died in his sleep of acute cardiac dilatation. No postmortem was done.

Here is a patient whose illness began so insidiously and in such a bizarre manner that it was a real problem to know what he actually was suffering from. The failure of the definite concrete symptoms in the early stages, the negative reports on blood cultures, the lack of discernable physical findings in the early stages of this sub-acute bacterial endocarditis makes it a disease of mystery, at least until the disease has made considerable progress.

COMMENTS

This case has interested me greatly and while there is not much literature available I will give a brief summary of sub-acute bacterial endocarditis.

Bacterial Endocarditis may be: 1. A very acute fulminating disease where the bacteria involved are hemolyticus, pneumococcus, staphlococcus aureus and rarely gonococcus. In these cases the disease is much more rapid and is known as malignant endocarditis.

2. When the organism is a non-hemolytic streptococcus, frequently called viridans then the resulting disease permits a little longer life in the individual and the term "sub-acute" is given to this type of bacterial endocarditis. It almost always results fatally after a long illness.

ETIOLOGY

Cause—The organism responsible for sub-acute bacterial endocarditis is in 90 to 95 per cent of the cases the streptococcus viridans, the other 10 per cent gonococcus or influenza bacillus. The chief predisposing factor is chronic heart disease, particularly old rheumatic valvular disease (in about 80 per cent of the cases). But a previously undamaged heart may also be the site of this disease. Focal infections, as in large and diseased tonsils or sinusitis, or an abscessed tooth may possibly be a predisposing factor.

The mechanism of the involvement of the heart has been variously considered. The direct blood stream infection of the endocardium damaged of old, perhaps with small thrombi or ulceration as a foothold for streptococci that happen to be circulating in the blood is probably the most usual mode of involvement more so than is the introduction of these organisms to the endocardium through blood vessels in the valves. It is possible that both methods of infection exist. The Streptococcus viridans is probably an invader of the blood stream even in normal people but it causes no disease unless it enters in large numbers or unless conditions favor its lodgement and growth as in individuals which have chronic heart disease. It stands to reason that some "streptococcic leak" must occur, in this case under discussion, no doubt, the pulling of the abscessed tooth was the necessary "leak" to introduce the Streptococcus into the blood stream as 90 per cent of infected teeth will culture Streptococcus viridans. Again the "leak" may be from infected tonsils, respiratory disease or sinus infection.

Age—The age at which sub-acute bacterial endocarditis occurs varies from early childhood to old age. It is commonest between the ages of 15 and 30 years.

Sex—Sub-acute bacterial endocarditis occurs in the ratio of about 60 per cent males to 40 per cent females.

Other Factors—Factors like race, climate and social and economic status are relatively unimportant. However, any illness, accident or exposure to cold and wet or to strain may apparently precipitate the disease.

PATHOLOGY

The pathology of sub-acute bacterial endocarditis is primarily that of involvement of the endocardium of valves by the disposition of irregular masses of fibrin, leukocytes, erythrocytes and platelets enclosing bacteria and products of bacterial degeneration, called vegetations. There may result from this inflammation of the endocardium an extension of the process into underlying tissues with deep ulcerations or perforations or aneurysm formation in the valve cusps, or local ulcerations and aneurysm of the aorta.

The valves of the left side of the heart are much more frequently involved than are those of the right side and the mitral valve oftener than the aortic. Pulmonary valve involvement is rare. The Streptococci viridans are found within these valvular vegetations and no means of therapy yet discovered can eradicate them from this tissue. At autopsy these valves with the vegetation have been preserved in formaldehyde for a year and then the vegetation cut open and a pure stain of streptococcus viridans has been grown.

SYMPTOMS

The symptoms are like those of any infection but are less severe than the acute bacterial endocarditis. Fever of varying grades occurs, sometimes hardly any at all and sometimes wide daily swings of septic type with normal or subnormal temperature in the mornings and high fever in the evening. Fever may be absent for days at a time and then recur at intervals.

Chills and sweats are common, anorexia, malaise, prostration and loss of weight and strength are usual, although for days, or even weeks at the onset there may be merely a feeling of fatigue with little fever. When embolism begins, coming from thrombi in the heart, local pain and other symptoms appear depending on the organ or the part of the body affected. Splenic, renal and cerebral infarctions are common with increasing anemia. There may be hemorrhages into skin, from the nose, lungs, stomach and kidneys in addition to the earlier phenomena. Finally the toxic state increases and weakness and mental confusion may become marked.

SIGNS

The characteristic signs of sub-acute bacterial endocarditis are fever, pallor, due largely to secondary anemia; petechial hemorrhages into the skin, mucus membranes and conjunctiva; splenomegaly; clubbing of the fingers and evidence of valvular or congenital heart disease. Rarely are all these signs well marked in a given case. Usually the diagnosis must rest on two or three only, generally supported, eventually, however, by finding of the Streptococcus viridans by blood cultures.

The superficial petechial hemorrhages may be found anywhere on the body—they come and go, often in crops, each spot rarely lasting more than a few days, beginning as a small reddish or purplish dot under the skin, not disappearing on pressure but gradually fading away in a few days. These petechial hemorrhages are evidently the result of damage to vessel walls by an unknown toxin which allows leakage of blood whenever pressure, trauma or some other factors favor it. The petechia are therefore related rather to a hemorrhagic tendency rather than to embolism as evidenced by the nose bleed which so frequently occurs in this disease. Petechial hemorrhages under the nails may be and usually are linear in shape and have been designated "splinter hemorrhages".

There is another superficial sign often of value but not found in all cases of sub-acute bacterial endocarditis. This is due to embolism of, or hemorrhage from a small vessel in a finger tip and consists of a deep, tender, purplish, slightly swollen, indurated area the size of a pea or smaller in the pulp end of the finger. The lesion comes suddenly and disappears gradually in the course of a few days. It is the so-called "Osler's node".

Still another sign found in fingers or toes is clubbing, but in sub-acute bacterial endocarditis it is very variable in occurrence and degree.

Splenomegaly is common in sub-acute bacterial endocarditis and its presence is a helpful sign. However, in about a third of the cases the spleen cannot be felt.

Blood pressure, X-ray examination and electrocardiographic studies show little or nothing abnormal except for evidence of underlying valvular disease.

Blood studies are of much importance. Secondary anemia is common with red cell counts between three and three and one-half million and hemoglobin of 60 per cent. In some cases the red cell count may drop to one million or less with hemoglobin of about 30 per cent. Leukocytosis is of a slight to moderate degree. Commonly it is about normal. The blood smears and blood platelets are about normal.

Blood cultures, repeated, if necessary should be positive for the Streptococcus viridans in close to 92 per cent of the cases.

The urine is essentially negative, unless renal infarction results from emboli.

COURSE AND PROGNOSIS

The gradual and insidious onset of this disease often prevents any exact determination of the time of the beginning. There may be a feeling of increasing fatigue and loss of appetite and sometimes there are vague joint and muscle pains. The victim may appear pale, listless and run down for a few weeks before fever or other symptoms force him to bed and to ask for medical advise. Months sometimes elapse with no definite idea of what is wrong, even in the physician's mind. Generally, however, in the early weeks of the illness the temperature reaction, anemia, enlarged spleen and clubbing of the fingers and heart signs and blood cultures show the presence of the fatal illness. Gradually the symptoms and signs increase, with development of embolic phenomena and death ensues a few months to a year or more after the onset of the disease. The average duration of the illness is about six months. Death is usually of toxic nature due to the infection itself and to the anemia but it may come from one or more of the complications.

TREATMENT

There is no specific treatment for this disease, either by drugs or serum. Salicylates, arsenic, sulfanilamide and all kinds of antiseptic preparations have been given by mouth, subcutaneously, intramuscularly and intravenously without avail. Arsphenamine, gentian violet, mercurochrome, merthiolate and other such drugs have been tried. Specific vaccines, serum treatments from immunized donors have all failed.

Sulfapyridin with crystallin heparin is now being tried but it is too soon to know what permanent effect it has on the Streptococcus viridans but time will tell as some very favorable reports have already been given.

Transfusions in general have availed little, even in the presence of severe secondary anemia.

Splenectomy has been tried but that is useless.

Other therapy of mechanical or thermal nature and artificial fever is of no particular use. Baths, violet or infra-red ray exposure, diathermy, inducto-therm are useless.

DIFFERENTIAL DIAGNOSIS

The few conditions from which it may be difficult to differentiate sub-acute bacterial endocarditis are:

1. Active, rheumatic heart disease.
2. Acute bacterial endocarditis.
3. Infections of other nature with or without chronic valvular disease.
4. Blood diseases or severe anemias, secondary to some other infections like tuberculosis, malaria, undulant fever or para-typhoid.

What the future holds for the cure of this disease only time will tell. Perhaps the successful treatment is sulfapyridin, or maphap the cure will be found in the test tube or guinea-pig cage of physical or biological chemistry—who can tell?

MORTALITY STATISTICS FOR TUBERCULOSIS

As long as reliable mortality statistics for tuberculosis have been known, young women have always been more prone to die of tuberculosis than have their young brothers or older sisters. While the general death rate from tuberculosis has steadily fallen, the death rate among young women has also decreased, but at a slower rate. The fact remains that tuberculosis is prevalent enough, particularly among young women, to warrant, in the opinion of many authorities, a tuberculin test on all pregnant women. Treatment of tuberculosis has advanced so rapidly in recent years, that with early recognition of the condition in pregnancy, it is possible in many cases to bring the baby through safely with no danger to the mother.—National Council for Mothers and Babies.

Coronary Thrombosis

Disease of the coronary arteries is common. It forms the background upon which coronary thrombosis develops. In a series of 1,000 consecutive autopsies 37.1 per cent showed macroscopic coronary disease. It is extremely important in that it often cripples or kills in the prime of life or in earlier years, and not merely in old age when little can be done in the way of prevention or control. Its deleterious effect on the heart results from a reduction of the blood supply to the myocardium. Coronary disease is of various types. Most of the cases are of the arteriosclerosic type. A few are syphilitic, fewer still are due to rheumatic infection and a rare case of endarteritis obliterans.

When a coronary vessel is partly or completely occluded the muscle supplied by that vessel suffers in a variable degree. The most common site of coronary occlusion is in the descending branch of the left coronary artery near its mouth; this vessel has been called "the artery of sudden death". The second most common site of occlusion is in the right coronary artery. Narrowing or blocking of smaller branches may be completely compensated for by the anastamotic circulation.

One of the outstanding symptoms of coronary thrombosis is pain in the chest although in some cases it may be absent. It may take the form of oppression or an awful sense of constriction or crushing pain. It is most commonly felt substernally but often radiates to the throat, midback, shoulders and arms or to the epigastrium. The pain may last for an hour or two to several days and often returns in milder forms in the succeeding days. Dyspnea is an equally important symptom and the sudden onset of choking, struggling respiration may mark the acute attack of coronary thrombosis. In the acute attack there often is seen the picture of severe shock. Nausea and vomiting are common symptoms and there is usually fever and leukocytosis. The so-called attack of acute indigestion is acute coronary thrombosis in almost all instances.

Few general rules to aid in prognosis in coronary thrombosis can be laid down; the course is so variable that each case must be considered individually. The immediate mortality amounts to between 15 and 25 per cent. The average length of life after recovery from an attack is about two years although some will live ten to fifteen years or more. The prognosis is worse when the following conditions are found: severe shock, prolonged substernal pain, continued high fever; gallop rhythm, pulsus alternans, heart block, cardiac asthma, congestive failure and embolic phenomena. The prognosis is better in posterior occlusion than in anterior lesions.—George W. Willison, M.D., Evansville; Jour. Ind. S. M. Assn., Vol. 34, No. 2, February, 1941.

Carcinoma of the Pituitary Body

Case Record Presenting Clinical Problems

CHARLES D. ARING, M.D., and RALPH H. FULLER, M.D.*

CASE 93296. A negro laborer of uncertain age, but in the sixth decade, was admitted to the hospital, his chief complaint being inability to raise the eyelids.

History: The onset of illness had occurred two months prior to admission with the appearance of intermittent epistaxis, always from the right nostril; this occurred at least once each day for about 50 days. Three days after the onset of epistaxis he began to have sharp "neuralgic" pains above the right eyebrow. These pains at times radiated around the lateral aspect of his head above the ear to the occiput; sometimes they were described as radiating from the occiput forward. The pain varied in severity and it was not always present. A few days after the onset of head pain, his eyes began to "burn"; this was noted first in the right eye but appeared several days later in the left. Shortly thereafter, aching pains were noted in the right malar and maxillary regions and there were spasmodic twitchings of the right eyelid. One week later (about five weeks before admission) the right eyelid began to droop. Within one week he was unable to open the right eye. The left eyelid then began to droop and it became paralyzed one week later. The onset of drooping of the left eyelid occurred simultaneously with mild pain in the left side of the face. Symptoms of indefinite duration were diplopia, which disappeared about one week before entry, and an inability to see anything clearly unless the head was turned and the object looked at directly.

No pertinent facts were found in the past history. He had always been in good health until the onset of the present illness.

Physical examination revealed the presence of "mucopurulent" exudate which completely occluded the right nostril, moderate tenderness to deep pressure over the right frontal and maxillary sinuses, and rather marked peripheral arteriosclerosis. The only other significant findings were neurological. There was complete ptosis of both upper eyelids; paralysis of all movement of the eyeballs (although very slight upward and downward movements of the optic disc were observed as the fundi were examined); and the pupils, which were each six millimeters in diameter, did not react to light. Despite the presence of dull pain in the right eye, in the right side of the nose and in the right cheek immediately bordering the nose, there was no loss of sensation in the face.

Laboratory Data: The blood and urine were normal on entry. The red blood cell count and hemoglobin content of the blood gradually declined until shortly before death when the red cell count was 3,800,000 and the hemoglobin 11.2 grams. Several blood Kahn and Wassermann tests were negative. Two analyses of the cerebrospinal fluid (pressure, appearance, cell count, quantitative protein, colloidal gold curve and Wassermann test), one on entry, the other two weeks later, were entirely normal. The blood urea nitrogen content was 16 milligrams, and the blood sugar content 74 milligrams per hundred cubic centimeter. An electrocardiogram was normal. Roentgenograms of the skull showed extensive destruction of the base in the region of the foramen magnum involving the petrous pyramids, clivus, posterior clinoid processes, and the sella turcica. There was considerable "ballooning" of the sella. The anterior clinoid processes were intact. Lipiodal was introduced into the sphenoid sinus and revealed a "filling defect". A biopsy specimen was obtained from the sphenoid sinus at this time; from this material a definite diagnosis could not be made although the impression was that of malignant neoplastic disease. On the eighty-fourth hospital day roentgen-ray studies of the skull were repeated. These revealed an increased amount of destruction in the region of the sphenoid sinus, additional encroachment anteriorily with almost complete destruction of the anterior clinoid processes and extensive erosion of the middle fossa of the skull.

Course in the Hospital: The patient's course was observed over a period of slightly less than four months. The temperature, pulse and respiration remained normal. There was little variation in blood pressure; the systolic pressure remained about 150, the diastolic pressure about 80. The fields of vision were repeatedly tested and remained normal; the last perimeter examination was done 57 days before death. The eyelids were held open with strips of adhesive tape. His eyes teared continually but he was able to read simple words even though he did not have his glasses which he had worn for 15 years. He was able to judge roughly the distance between his eyes and objects on the ward and their relationship in distance one to another, although it appeared he could not perceive depth when tests were made with the Worth amblyoscope. There was inability to obtain binocular fusion using the Bielschowsky tube test. On the thirteenth hospital day he complained of pain in the forehead above the left eyebrow; this pain radiated downward anterior to the ear to a point beneath the ramus of the left mandible. For the first time diminution in sensitivity of the left cornea was evident as was also diminution in the appreciation of all modalities of sensation in the distribution of the lower two branches of the trigeminal nerve on the left. Increased salivation was noted on the forty-second hospital day; this symptom persisted until his death.

The patient stated that his voice was becoming

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Selected by R. S. Austin, M.D., Professor of Pathology, University of Cincinnati College of Medicine as the second of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems."

"hollow". He became gradually more feeble and lethargic. At about this time tests of the auditory and vestibular function were done. Auditory function was found to be normal. Caloric tests were negative except for the fact that at no time could dizziness or the sensation of whirling of objects in the visual field be induced; of course nystagmus was never seen. The postural changes and "past-pointing" incident to syringing the external auditory meatus were normal. On the fiftieth hospital day weakness of the right face was noted and he became unable to open his mouth more than one-half inch. The lower jaw then deviated to the right. Deep seated pains migrated about the head and were noted particularly in areas supplied by the middle and lower branches of the left trigeminal nerve and the lower branch of the right trigeminal nerve. For the first time, inequality of the pupils was observed; the right measured 3.5 mm. and the left 7.5 mm. in diameter. Neither pupil reacted to flashlight. Chewing and swallowing became increasingly difficult. By the eighty-second hospital day the jaw hung partially open and a thick yellow saliva drooled from the mouth. The patient had lost weight rapidly and was extremely lethargic. The right pupil was now larger than the left. Left facial weakness had developed. The soft palate was paretic and there occurred frequent choking. His speech was practically unintelligible. The tongue showed atrophy and could be extended only slightly. Fasciculation of the tongue was observed. Muscular weakness and wasting was generalized. The findings on motor, sensory and reflex examination of the extremities were essentially normal. Feeding had to be done through a nasal tube. Death occurred on the one hundred and thirteenth hospital day and was associated with aspiration of the mouth contents and the development of bronchitis.

The clinical neurological diagnosis was chordoma of the base of the skull, arising from the clivus.

CLINICAL DISCUSSION

The localization of the lesion was rather obvious from the time the patient was first seen, although the lack of certain signs expected with such localization was not easily explained. Early in the course of the disease and at the time of hospitalization, objective neurological findings were confined to the third, fourth and sixth cranial nerves on both sides. Complete interruption of function of the oculomotor, trochlear and abducent nerves had occurred (ptosis, large fixed pupils and external ophthalmoplegia). There is only one site within the cranium where these six nerves, three on each side, can be interrupted within a small area. At a point close to the brain stem shortly after emergence from the pons, these nerves which control eye movements pass over the clivus either beneath (abducent), or lateral to (oculomotor and trochlear) the posterior clinoid processes. Roentgenograms of the skull were confirmatory in that a destructive lesion was shown to involve the posterior clinoid processes and the clivus. It was not easy to explain why there was not enough interference with the function of the ophthalmic division of the trigeminal nerves to affect the corneal reflexes and sensation to the forehead. The history of pain in the eyes and in the malar and maxillary regions was an indication that the trigeminal nerves were involved. Lateral to the posterior clinoid processes the trigeminal nerves lie immediately lateral to the third, fourth and sixth nerves. The escape of the optic tracts, practically to the end of the illness, is even more inexplicable. However, the absence of an expected sign should not deter finer localization; experienced neurologists commonly encounter such discrepancies. As the disease steadily progressed and signs of involvement of other cranial nerves appeared (trigeminal, facial, glossopharyngeal, vagus and hypoglossal) it became evident that the process was extending rather rapidly in the base of the skull. The final roentgenogram showed a marked increase in the amount of destruction in this region.

After one has ascertained the localization of a neurological lesion, the second diagnostic problem is to educe the nature of the process. The onset of this patient's illness occurred only two months prior to the time he was first seen, by which time he had complete ptosis and inability to move the eyeballs. Despite the rapidity with which the disease progressed, there occurred a definite sequence of events. The march of events was inexorable. Infectious disease and degenerative vascular disease may be safely dismissed from consideration. The story, in this case, is one of neoplasia. The rapidity with which the disease progressed, in a man past 60 years of age, suggests that it is one of malignant neoplasia. However, a number of neoplastic entities, some essentially benign, must be considered in differential diagnosis.

Meningiomata occasionally arise in the area of the tuberculum sellae or sphenoidal ridge; however, the clinical course is one of slow development and they usually first produce functional disturbances by implication of the optic tracts or chiasm.

The craniopharyngioma (tumor of Rathke's pouch) arises from squamous epithelial cell rests of the hypophyseal duct. If these tumors are large they are usually cystic. They may occur at any age but they are usually seen before the age of 15. Common symptoms and signs are headache, weight loss and defects in the visual fields. Spotty supra-sellar calcification is found in 85 per cent of cases. These tumors destroy the clinoid processes but rarely "balloon" the sella. Only in advanced cases, usually after years of precedent symptoms, are the third, fourth and sixth nerves involved.

Carcinoma arising in the sphenoid sinus, or in the nasopharynx, may erode the base of the skull and spread intracranially. Some neurologists are inclined to weigh the initial symptom rather heavily in assessment of the history. In this instance bleeding from the right nostril was recorded as the initial symptom. However, the story obtained from the patient cannot be relied upon entirely. His daughter frequently contradicted his word and there was some thought that the initial symptom may have been sharp, intermittent, radiating pain beginning above the right eyebrow. The first attacks of epistaxis occurred while he was engaged at hard manual labor, shoveling dirt. If the bleeding, always from the right nostril, could with certainty be identified as the initial symptom, sphenoid or nasopharyngeal carcinoma would be the favored diagnosis.

Neoplasm arising in the pituitary body must be considered. So-called "adenomata", probably essentially examples of non-neoplastic cellular hyperplasia, may be associated with widening of the sella but rarely with extension of the disease process beyond the limits of the sella. When frank neoplastic disease arises in the pituitary it is of epithelial cell type but is almost always malignant. These tumors vary in size. For varying intervals of time they tend to remain rather strictly localized or encapsulated and to produce symptoms referable to the sellar region. The sella is regularly widened and the dural diaphragm distended. Usually the clinoid processes are destroyed. Eventually, carcinoma of the pituitary shows a definite capacity for destructive local invasion. The dural diaphragm may be ruptured, leading to massive neoplastic infiltration of the base of the brain. Extradural dissection may cause compression of the cranial nerves and result in signs of cranial nerve disfunction. There may be extensive erosion or infiltration of the base of the skull with invasion of the sphenoid sinus and superior nares. However, in this case there was no prodromal period referable to the sellar region. There were no signs of involvement of the optic nerves, chiasm or the optic tracts. "Neuralgic" pains darted about the head and face from the onset but it cannot be said that the patient ever suffered from prolonged headache. Carcinoma of the pituitary is, moreover, an extremely rare lesion.

The chordoma is a rare tumor which arises from an excrescence on the clivus. This excrescence can be found at necropsy, in about 2 per cent of routine cases, situated about one centimeter posterior to the dorsum sellae. It is a persistent remnant of the notachord and communicates, through a small defect, with the interior of the basi-sphenoid. Chordoma may extend into the interpeduncular cistern, into the nasopharynx, or into both regions. Within the cranium, they often project downward beneath the pons toward the foramen magnum. The clinical story, in this case, is not inconsistent with the diagnosis of chordoma. The area from which this tumor arises, namely the clivus, the bony surface which slopes down posteriorly from the pituitary fossa, is at an exact point medial and inferior to three pairs of nerves; the third, fourth and sixth cranial nerves. There was early clinical evidence of involvement of these nerves by the disease process in the case here under consideration. Palsies of cranial nerves are the prominent symptoms of chordoma. All of the nerves from the optic to the hypoglossal, or any combination of them, may be involved. Symptoms of increased intercranial pressure are unusual; if they appear it is only late in the course of the disease. Erosion of the base of the skull may be demonstrated roentgenographically in chordoma. However, chordoma cannot be differentiated clinically from sphenoid or nasopharyngeal carcinoma which has extended intracranially, or from carcinoma of the pituitary body with erosion of the base of the skull, except by biopsy.

CLINICAL PROBLEMS

Aside from the primary neurologic diagnostic problems of localization of the disease process and its identification as to entity, the patient whose case does not present secondary problems, particularly in the neurophysiological sphere, is rare indeed. Individuals who recognize these problems and attempt to solve them are sometimes called "clinical investigators". Medical practitioners have an unlimited opportunity to become "clinical investigators" for the requirements usually involve no more than careful observation, minute recording of observation and critical analysis of the data compiled.

This case presented a number of these secondary problems, only two of which are considered in some detail. The first of these was the problem of depth perception. It has been suggested, but not proved, by clinical investigation that the ability to perceive depth depends upon proprioceptive impulses which are initiated in the ocular muscles. Given an intelligent patient who presents himself with his eyes fixed directly forward so that he is unable to move his eyeballs, we are offered an opportunity to study the problem. Obviously the patient can receive little proprioceptive stimulus from paretic eye muscles. On the twenty-seventh hospital day the visual acuity, without correction, was 20/40 right and 20/20 left. Muscle balance tests, without correction, revealed a thirteen degree exophoria with a two degree left hyperphoria for distant vision and a nineteen degree exophoria with a six degree left hyperphoria for near vision. On the following day the patient was extremely cooperative and showed no evidence of mental abnormality. When the patient sat erect there was no diplopia or blurring of vision at two or three feet. Two white objects, each six millimeters in diameter, were placed in a relatively straight line from his eyes, the first at a distance of two feet and the second at a distance of three feet but in a manner so that one object did not obscure the other. He noted that these objects appeared to be at exactly the same distance from him. This test was performed repeatedly with the same result. The patient was able to name large objects in the room and to correctly estimate relative distances, but this possibly involved reasoning power. Tests with the amblyoscope indicated that depth perception was lacking. The patient demonstrated first and second degree fusion but failed satisfactorily to demonstrate third degree fusion.

The other problem which lent itself to clinical investigation in this case was the relationship of nystagmus to dizziness. It has been thought that dizziness may result because of nystagmus and that dizziness may not be experienced in the absence of nystagmus. It is impossible to induce nystagmus in a patient whose eyes are immobile. Caloric tests for vestibular function were done. The normal responses to vestibular irritation are nystagmus, involuntary deviation of the patient's position and involuntary deviation of voluntary movement ("past-pointing"). In this patient nystagmus was not induced but the tendency to fall to one side and "past-pointing" were. At no time were we able to cause dizziness in this patient. This evidence, which would seem to indicate that nystagmus must occur before dizziness can be produced, was negated when these same tests were performed upon persons who had their eyes enucleated years before. Despite the "absence of nystagmus", violent dizziness, on one occasion accompanied by vomiting, could be induced in two such individuals by rotation tests.

Necropsy (N-38-424), limited to examination of the intracranial contents, was performed by Dr. Sabro Tashiro. The dura was incised and the brain was removed from the cranial vault after section of the infundibulum, the internal carotid arteries and the cervical spinal cord. There were no adhesions at the base of the brain. The olfactory nerves and the optic chiasm and nerves appeared normal. There was a deep depression in the left temporal lobe which corresponded to an extradural distortion of the floor of the left middle cranial fossa. The depression was in the anterior portion of the ventral surface of the left temporal lobe. The pons and medulla were flattened and widened due to compression by the extradural mass which lay anterior to these structures. The vessels of the circle of Willis showed only slight atherosclerotic change.

The pituitary body could not be identified; the pituitary stalk could be followed superficially into the substance of a non-encapsulated tumor mass which appeared to have completely replaced the pituitary body and to form a swelling in the pituitary area. Nowhere did the tumor penetrate the dura. The tumor mass appeared to dissect beneath the dura to produce local swellings in the floor of the middle cranial fossa, particularly on the left, and over the clivus and basilar groove of the occipital bone. The dura was stripped from the skull and tumor and it was found impossible to remove the tumor in its entirety. The substance of the tumor was soft and friable, semi-translucent and grayish-white. The tumor stroma was sparse but appeared extremely vascular. The large blood vessels and nerves at the base of the skull were embedded in the tumor mass; the vessels were not collapsed nor was there evidence of thrombosis. Aside from the dural membrane, the tumor mass was found to possess no margin of sharp delimitation. Extradural dissection and elevation of the dura by the tumor mass extended: anteriorly, to the posterior limit of the sphenoid spine; posteriorly, to fill the basilar groove of the occipital bone; anterolaterally, to midpoints over the right and left great wings of the sphenoid bone; posterolaterally, to a midpoint over the petrous portion of each temporal bone. The disease process had resulted in obliteration of the clinoid processes and in replacement of the roof and floor of the sphenoid sinus by neoplastic tissue. Tumor tissue filled the cavity of the sphenoid sinus and invaded the retropharyngeal soft tissue. The great wings of the sphenoid bone and the petrous portions of the temporal bones were in part destroyed and replaced by new growth. The clivus and basilar portion of the occipital bone were transformed into neoplastic tissue which could be curetted away to expose the atlas.

Histologic examination and comparison of sections of tissue taken from various regions, including the sphenoid sinus, showed the tumor to be of relatively uniform structure. The tumor parenchyma was made up of polygonal epithelial cells, most of which closely resembled the chromophobe cells of normal pituitary but contained nuclei which showed greater variation in size. The nuclei tended to be spheroidal, to be centrally situated in the cells and to appear vacuolated although they showed considerable variation as to the intensity of basic stain. Many of the nuclei contained conspicuous nucleoli. Mitotic figures were numerous. The cytoplasm stained lightly and was minutely granular, almost homogeneous. In material stained by the Biggart method, although most of the cells appeared to be chromophobic, granules taking the eosin stain were to be found in the cytoplasm of occasional cells. In still other scattered cells the cytoplasm appeared slightly foamy. The cytoplasm was not abundant in amount; the cell boundaries were not always sharply defined. For the most part tumor cells were loosely packed into bulky masses and into irregularly anastomosing columns. There was no definite acinar arrangement of the cells, although in certain areas in which the cells were most loosely packed, numerous small spaces appeared to be bounded by anastomosing single or double row cords of cells. These ill-defined spaces occasionally contained amorphous material, but nothing which could be identified as colloid. The connective tissue supporting and separating the larger cell masses and columns was scantily cellular and somewhat myxomatous but rich in thin-walled blood-vascular channels. Embedded in the stroma, in occasional areas, were small islands of incompletely degenerated cartilagenous or osseous tissue.

Microscopic sections of the oculomotor, trochlear and abducent nerves showed considerable evidence of demyelinization and of fragmentation and swelling of the remaining axis cylinders. Many of the axones were completely degenerated.

The final diagnosis was carcinoma of the pituitary body.

COMMENT

In this case the tumor cells have characteristics which strongly suggest their identification as biologic mutants of the chromophobe cell. The presence of eosinophilic granules in the cytoplasm of occasional cells is quite characteristic. The appearance of such cells in carcinoma of the pituitary is a bit of evidence in support of the theory that the normal chromophobe cell is an undifferentiated or resting chromophil cell. There are, in the tumor, cell arrangements such as to suggest an imperfect imitation of pituitary structure. Histologically, the lesion is an example of malignant neoplasia of epithelial cell type and must be termed carcinoma; the term adenocarcinoma might be employed since the tumor is derived from glandular epithelium. No justification can be seen for the use of the term "malignant adenoma", as has been suggested in the recent medical literature, to describe malignant tumors essentially of chromophobe cell type but which fail to metastasize. There are several varieties of carcinomata which are characterized by local and destructive invasive growth but which metastasize rarely. As evidence is accumulated to show that carcinoma of the pituitary body falls into this general category, the concept becomes one of considerable clinical importance.

Evidently, in this case, the phase of local expansive growth on the part of the tumor either did not occur or was of very short duration; almost from the beginning the process must have been one of spreading infiltrative growth. There was no prodromal period dominated by symptoms referable to the sellar region. The biopsy study, although it confirmed the impression that the disease process was one of malignant neoplasia, did not yield sufficient information to classify the tumor. The clinical course was most consistent with the diagnosis of chordoma. This rather rare neoplastic entity is of commoner incidence than carcinoma of the pituitary body. Clinical failure to make the correct diagnosis was unfortunate since carcinoma of the pituitary has been found to respond quite satisfactorily to Roentgen-ray therapy. Despite its failure in this instance, biopsy remains the key to solution of the clinical diagnostic problem presented in this case.

Thomas Emmet once said that "the curet is an instrument of the devil". Surely that instrument is capable of much harm if used injudiciously and indiscriminately. Personally I feel that there are few indications for the use of the sharp curet in in the treatment of incomplete abortion or retained secundines.—David Findlay, M.D., Omaha; Neb. S. M. Jour., Vol. 26, No. 3, March, 1941.

A Vaccine for Influenza

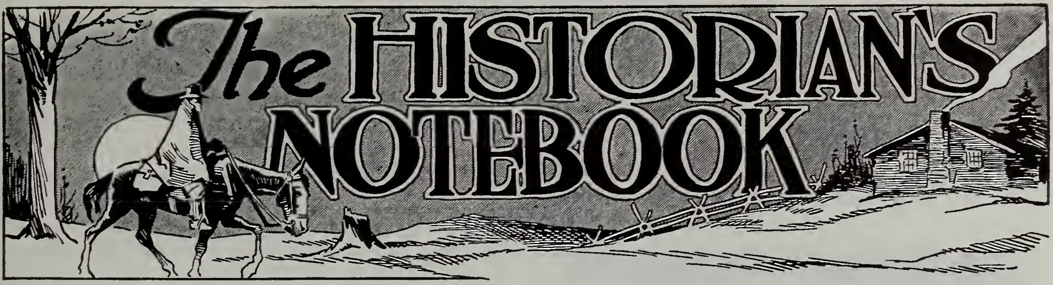
Some totally unforeseen outcome of an experiment has proved to have useful clinical application. A recent example of the accidental discovery of a complex influenza vaccine by Horsfall and Lennette of the Rockefeller Foundation is of timely interest.

These authors, in the study of influenza, were experimenting on ferrets. The animals were inocculated intranasally with the 1939 strain of human influenza virus. In the course of the experiment several of the animals with influenza developed a concurrent infection with distemper. Inasmuch as distemper is epizootic, an attempt was made to protect the normal animals in the laboratory. A formalized vaccine was prepared from the lungs and spleens of the animals who had concurrent influenza and distemper. The vaccine was injected subcutaneously into 157 normal ferrets. Two days after the administration of the vaccine, groups of the vaccinated ferrets were inoculated intranasally with large doses of three antigenically different strains of human influenza vaccine. Much to the surprise of the authors none of the animals developed experimental influenza. The injection of the vaccine had protected the ferrets from three different strains of influenza virus which is superior to the immunity which results after actual recovery from infection with the influenza virus.

After repeated attempts it was finally found that the multivalent vaccine could be reproduced by inoculating ferrets simultaneously with mixtures of human influenza virus and canine distemper virus. This formalized vaccine protected the animals, not only from canine distemper, but also from all strains of human influenza virus. When the vaccine was tested on human volunteers, it resulted in a definite increase in multivalent virucidal antibodies.

The authors have determined that the results are not due to antigenic similarities between distemper and influenza virus. They conclude that in the presence of concurrent distemper infection the human influenza virus undergoes some biochemical mutation which renders it less virulent, less specific and more broadly antigenic than the original virus.

The fact that vaccination of ferrets with human influenza virus does not afford complete immunity even against homologous strains, but that the new complex vaccine establishes a broader multivalent immunity is the practical result of this accidental laboratory discovery. A new field of investigation in immunity is opened up, but whether similar vaccines with other viruses will be effective remains to be proved.—Editorial, Jour. Iowa S.M.S., Vol. XXXI, No. 2, February, 1941.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

A Medical Pioneer of Trumbull County a Century Ago*

HOWARD DITTRICK, M.D.

THE many papers, records and effects of Dr. Abner Webb, which have come to the Museum of the Cleveland Medical Library, form the material upon which this paper is based. These records constitute so complete a picture of the medical education, the professional life and practice, of a doctor of Trumbull County almost a century ago, that they are of unusual historic value. They contain as well an insight into the student life, fees, courses of instruction and text books used in the Medical Department of Western Reserve College in 1844-46. The teaching staff, the emphasis on diseases current at that time with the methods taught for their relief—these are all painstakingly recorded. And the postgraduate work at Jefferson Medical College in Philadelphia, with Dr. Webb's pamphlets, lecture cards and theses,—these carry on the record of advanced instruction of the period. A fee book, invoices of drugs and instruments, a book of prescriptions collected from many sources, these illuminate the story of Dr. Webb's professional life. Only rarely is there found an account of a pioneer doctor's life so completely represented by documents.

Dr. Abner Webb, who practiced in Girard, was born in Austintown on May 11, 1821, and died on November 30, 1874. His father was also named Abner Webb, and was born April 3, 1775, in Stafford, Tolland County, Connecticut, and married Rebecca Yale. Rebecca (b. 1780, d. 1850) was daughter of Elihu Yale of Wallingford, New Haven County, Connecticut.

The Author

● Dr. Dittrick, Cleveland, Ohio, is a graduate of University of Toronto, Faculty of Medicine, 1900. Member American Association of the History of Medicine, International Association of Medical Museums, American Association of Medical Museums, Ohio State Historical and Archeological Association; director of Museum of the Cleveland Medical Library; editor, Bulletin of the Cleveland Academy of Medicine; editor, Current Researches in Anesthesia and Analgesia.

The Webbs were a very large family in Stafford. As someone described the record in the family Bible, "there were two pages full of children who mostly died," in short theirs was a typical family of that time. Abner Webb, senior, and his wife, Rebecca, came to the Western Reserve in 1801, settling first in Poland, later in Austintown. They had spent six months in the journey through the forest, we are told, so they probably came by the route which led through Pennsylvania to Pittsburgh, to the Beaver River, and up the Mahoning River. The district where they first settled was known as early as 1775, some time before organization of the Connecticut Land Company, when people had travelled from Pennsylvania to Salt Springs, near the present site of Niles and Warren, to evaporate salt. Probably the first arrival in Poland had been Turhand Kirtland, afterwards known as Judge Kirtland, who came from Wallingford in 1798, acting as agent for the Connecticut Land Company. After spending several summers surveying in that district while he spent his winters in the East, he came to stay, in company with his brother Jared and both their families. Doubtless he made known to the Webbs, relatives by marriage, the advantages of this particular settlement.

Though members of the Webb family were small in stature, Abner, Jr., born in the Western

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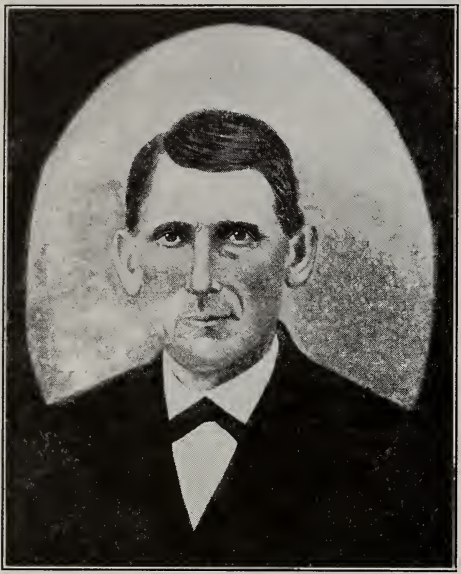
*Read before the Trumbull County Medical Society at Warren, Ohio, on December 18, 1940.

Reserve Wilderness, grew into a very sturdy young man, six feet tall, broad and strong. With his fine physique went a lovable disposition. Gentle and kindly, he made and kept many friends. The family was not deeply religious, and their connection with the Disciples Church in Austintown was not very close, possibly because of differing beliefs. Nevertheless young Abner grew up knowing the Bible well, since everyone of his community took out their debating proclivities in argument about "pints" of the Bible. Abner gloried in the fray, in which he was no mean contender.



ABNER WEBB, M.D.

This ability must have served him when he wanted to go to medical college, for family tradition has it that his relatives disapproved of this expenditure of time and money on further education when the farm needed his work. The whole connection was prosperous, and when he did go, any money he needed was always supplied, so that he was spared financial anxiety. His arrangements for economical living at college showed that he was willing to sacrifice some comfort for economy.

In the fall of 1844 he entered the Medical Department of Western Reserve College, which was at the southeast corner of Prospect and Ontario Streets. In the preceding March this medical department had been formed by taking over Cleveland Medical College.

In September, 1844, he had a letter from E. D. Leach of West Greenville, Pa., another prospective student, who had corresponded with Professor Jared Potter Kirtland in order to investigate living costs for students. Professor Kirtland had assured him that the college could put at the disposal of a group certain rooms in the college building where they might board themselves at no expense for rent, and at a very moderate expense for food, which they could procure "either cooked or uncooked at a low rate." The enterprising Leach invited Webb to join the group he was forming, adding "we can by this economical plan save enough to purchase several standard medical works. I think self-boarding will be attended with but little inconvenience, and certainly no disgrace. The different members of the club will cook week about, or otherwise as may be determined upon. Boarding cannot be obtained at the boarding houses short of two dollars per week. This is more than I, in my present unavoidable circumstances, can afford to pay. We can fare sumptuously every day at our own house and always be on hand when lectures commence."

As an added comment of encouragement he writes, with an assumption of superior wisdom, "It is very sickly here now—doctors kept busy—fever and ague, bilious fever, are the principal diseases to combat."

For the session 1844-45, Abner Webb paid for the following courses:

Materia Medica, Pharmacy and Botany	Dr. John L. Cassels
Chemistry and Medical Jurisprudence	Dr. Samuel St. John
Practical Anatomy	Dr. Horace A. Ackley
General Pathology and Physical Diagnosis	Dr. N. Worcester
Theory and Practice of Medicine	Dr. Jared P. Kirtland

Lecture cards for the second session, 1845-46, show some rearrangement of teaching, in that General and Special Anatomy and Physiology were taught by Dr. Jacob J. Delamater, Pathology and Obstetrics by Dr. John Delamater, and Surgery by Dr. Horace A. Ackley. Other lectures by Dr. Cassels and Dr. St. John were continued in the same courses as in the first session. Matriculation and general admission cards were issued for each session.

A printed card of "Rules for Students" almost a century ago will arouse memories of landladies we all knew, stern, long-suffering ones whose trials have not changed throughout the years.

(1) Householders are required to report to the Faculty any continued and excessive disorder that may occur in their respective houses.

(2) This is not a public house. Persons wishing to call upon anyone rooming here will please seek admittance as to any other private house.

(3) There shall be in these rooms no use of tobacco or intoxicants, no card playing or profane language.

(4) Students occupying a room will be held responsible for all damage to the room or to furniture, beyond the natural wear of the same.

(5) Rooms are rented for the term. If a student vacates his room before the close of the term, full rent will be charged for the remainder of the term.

(6) Students who have been required to leave any room in the village for any misconduct will not be received here as roomers during the same term.

(7) The college study hours must be observed.

(8) Any boisterous or disorderly conduct during these hours subjects a student to being reported.

(9) Any student violating these conditions forfeits his right to the room and may be required to vacate at any time.

COST OF MEDICAL EDUCATION

What was the cost of a medical education at Western Reserve College a hundred years ago? With board at $2.00 a week, which included food, lodging, fuel and light, the sixteen weeks came to $32.00. Admission to all lectures was $50.00, making $82.00 a year, or $164.00 for the two year course. To this was added $3.00 for martriculation and $20.00 for graduation fee, making a total of $187.00. But books enter into the account, and Dr. Webb's papers include the following invoice of textbooks sent to him from Lea and Blanchard in Philadelphia, by rail to Pittsburgh and canal boat to Youngstown. The total cost of these was $30.00.

Carpenter's Physiology	$3.25	
Wilson's Anatomy	3.25	
Watson's Practice	3.00	
Williams' Pathology	1.75	
Dewees' Midwifery	3.50	
Dunglison's Dictionary	4.00	
Graham's Chemistry	2.50	
Mowry's Dental Surgery	2.75	
		$24.00
		3.60 (less 15%)
		$20.40
Liston's Elements of Surgery	3.00	
Wood & Bache's Dispensing	4.50	
Miss Lincoln's Botany	1.00	
Lee's Observations	1.35	
Net	$9.85	9.85
		$30.25
		.25 (Discount)
		$30.00 (Amount Due)

Thus, with allowance for books, laundry and other incidental expenses, the young doctor would have spent about $225.00 in acquiring his degree. We have the lecture cards for both sessions, 1844-45 and 1845-46, properly endorsed on the back by the professors, as well as the matriculation card signed by Dr. Horace A. Ackley as dean and a receipt for the graduation fee of $20.00 signed by Dr. Samuel St. John as treasurer.

According to the prospectus, "when desired, a promissory note payable in twelve months for $56.00 and signed jointly with some responsible person, the responsibility to be certified by a justice of the peace and judge resident in the county, will be received in place of money at the time."

But Abner Webb's dues for both sessions were paid promptly in cash. The method of the second year's payment is made clear by an agreement found in his papers. The text of this reveals, in neat precise script, the excellent education of his father in practical business, legal procedure, and even in the training of his son in adult responsibility. This paper was an agreement to secure a promissory note on the part of Abner, Jr., for the sum of $154.00 provided on November 3, 1845, presumably for expenses of his second year in college. The note was to be due in five months, and according to this agreement, at the option of Abner, Jr., partial payment could be made by deeding to his father a certain ten acres of a fifty acre tract of land at a price current in the neighborhood at the time of transfer, this sum to be applied to payment on the note. The signature was cut out later, indicating cancellation.

During January of his first session he was seriously ill in his cooperative student lodging, and it appeared that he might be unable to continue his studies for the year. Two letters from fellow-students in the housekeeping venture apprised his family of this acute illness with "inflammation of the stomach and perhaps the small intestines," and asked that some member of the family come promptly to assume responsibility. Evidently there was alarm lest it might be the onset of one of the protracted fevers. Data of his recovery is lacking, but it would appear from his lecture notes that he lost little time from his studies. His friend, Leach, the writer of one of the above letters, subsequently enjoyed a thriving practice in Niles.

A WORD ABOUT THE PROFESSORS

A word about the professors. Horace Ackley was of course the dynamic force on the faculty. Although his medical education had been rather sketchy, he became Cleveland's first surgeon and attained a wide reputation. He was of the rough and ready type, fond of hunting, resourceful, paying little attention to his dress. Many tales of him survive to indicate a most picturesque character.

Dr. John Delamater was in demand as a teacher. He taught in many schools, including

Dartmouth, where he was associated with Dr. Oliver Wendell Holmes. He was doubtless the patriarch of the faculty.

Dr. Jared Potter Kirtland was also renowned in geology and horticulture. He graduated from Philadelphia Medical College and settled in Poland in 1823. He served two terms in the state legislature and had been state geologist.

Dr. Noah Worcester wrote the first textbook on diseases of the skin published in the United States. Drs. Cassels, St. John and the younger Delamater were all good teachers but less outstanding than the others.

It would appear from Abner Webb's book of notes taken under these different professors that attendance in classes of the two years was not sharply defined as to sequence. Some lecture cards issued for advanced classes were attended by Webb during his first session.

STUDY OF EPIDEMICS

From Webb's notes we learn much about the teaching of that era. In medicine stress was placed on the study of epidemics, which, like the poor, they had always with them. Having no knowledge of bacteriology, they sought the cause of outbreaks of these scourges in climate, seasonal changes, winds, rainfall, severity of winters, first appearance of frosts, and careful notes were made of such matters throughout the country. Dr. Daniel Drake of Cincinnati has written a classic account of such findings in the Middle West. Since they blamed miasmatic and climatic conditions for epidemics, they had no effective method of combating them. We have noted, however, Dr. Webb's use of quinine (discovered 1820) and vaccination later when practicing in Girard.

The stethoscope was in common use and the cardinal principles in physical diagnosis were understood and taught. Dr. Kirtland in his lecture on November 14, 1844, told the students that by auscultation or hearing of sounds made by percussion, disease might be detected. He describes the stethoscope as "an instrument of some eight inches in length with a hole through it, concaved at one end and applied to the body, the sound is collected and transmitted to the ear and these sounds differ in respect to the different parts it is applied to." The students were instructed to listen with the stethoscope for the placental bruit after the fourth month of gestation.

Professor Kirtland taught that potassium iodide was a specific for syphilis. Professor Worcester agreed that of all remedies most in use "hydrioate of potash" was the best. Professor Cassels suggested the use of mercury, administered as prepared chalk, in the treatment of syphilis and scrofula. Professor St. John recommended the use of iodine in glandular affections such as goiter. "Burnt it is used in this affection," the notes read, and how near the professor would have been to the discovery of thyrotoxin if Abner Webb's notes were entirely accurate, for he goes on to say "on account of its containing the principle to a considerable extent."

The older practitioner will remember the time spent by his teachers in impressing upon the students the many variations in the pulse in disease. Professor Kirtland, we read in Webb's notes, described twelve varieties. The first six are regular, frequent, quick, full, strong and hard, and the six opposites are irregular, infrequent, slow, shallow, weak and soft. Have we, in these latter days, lost something of the art of diagnosis through neglect of finer impressions obtained through our trained senses? Since the Dublin School introduced counting the pulse by the watch, instruments of precision have contributed to inertia of our gray matter. Today all we know about the pulse is what we read in the sphygmomanometer.

Professor Kirtland spent most of his time discussing fevers. At that time many patients were ill of what we recognize as malaria and typhoid fever, often occurring in epidemics. Since the organisms were not known, the medical teachers classified fevers according to symptoms. Thus in Abner Webb's notebook the following terms were applied to fevers: hectic, phlogistic, bilious, intermittent, remittent and continued. The terms typhus and typhoid were often used interchangeably. Yellow fever also occurred in distant shipping centers, Montreal, Philadelphia and New Orleans, and there was always danger of such diseases being transported via the Great Lakes and the Mississippi and Ohio Rivers. Smallpox and even cholera were other deadly scourges which were often sources of grave anxiety.

NOTES ON TREATMENT

But notes on the treatment of fevers are more arresting than their varieties. Treatment was truly heroic both as carried out by the physician and as endured by the patient. It would seem that the chief axiom of treatment of the patient was—if he does not bleed to death, bleed and bleed again. Listen to Webb's notes on Professor Kirtland's lecture, slightly paraphrased for clarity. "Bilious and remittent fevers should be treated by equalization of the circulation. This is fulfilled by bleeding, that is, when the patient is plethoric and there is a determination to the head or some other organ. When there is an increased quantity of blood to the head there is coma and delirium, while the extremities are cold. This can be stopped by putting on ice, or cold water applied by pouring, after covering the shoulders with india rubber, or by applying bags of ice. Warm fomentations, such as warm bathing or mustard poultices may be applied to the extremities. These may be used alternately over one ankle and then the other, every day."

"The second part of the treatment is fulfilled by evacuations, the best medicine being calomel in the dose of 10 to 15 grains as a dose two or three times a day. This should be worked off by some laxative medicine such as castor oil, salts, rhubarb or magnesia in the morning."

"The third part of the treatment, diminution of the morbid factor, may be fulfilled at the same time by giving opium, laudanum or Dover's powder, allowing the calomel to stay in the system as long as possible, so as to affect the gums or form a fur by the side of the teeth, and to cause salivation. If the skin continues dry with considerable thirst, give some cold water and sponge the skin. Also give diaphoretics so as to induce moisture of the surface. This can best be done by giving calomel in minute doses, two grains to ten grains of ipecac. As to diet, such only should be used as to agree with the patient's stomach. Meat should not be used, but rather any farinaceous diet as arrowroot or rice water, and also beef tea, coffee, etc." The results of all this medication on the patient's gastrointestinal tract can be imagined from Professor Kirtland's suggestion that two beds be used alternately for such patients. To us it would seem that with the diet of rice water and arrowroot, the patient's chance of recovery would have been better if all other treatments had been discarded save two, "give some cold water and sponge the skin."

METHODS OF PHYSICAL DIAGNOSIS

Even today Professor Worcester would be considered a good teacher of physical diagnosis, since the lecture notes quote him as emphasizing the prolongation of the expiratory note in tuberculosis. Abner Webb was instructed in percussion, auscultation, recognition of dry and moist rales, bronchophony and pectoriloquy. He was taught to use the pleximeter and the stethoscope. No mention is made of the thermometer. The professor warns that mediate auscultation is not always feasible, sometimes as a matter of delicacy and again as a matter of personal hygiene in examining an objectionable patient. He was an early advocate of the use of a belt instead of suspenders. "Straps worn by gentlemen," we read, "produce it (phthisis) by first pressing on the upper part of the thorax where the tubercles form in the upper part of the lung and keep it from dilating." You will also note that he was familiar with the most common site of the lesion. Professor Worcester concluded there was "more cutaneous disease at present than in ancient times; the reason may be that the ancients took better care of the skin by bathing often." He was a rare soul who understood the art of medical practice. He advised "When called to treat a patient with laryngitis, if hysterical, let them alone, look wise, and say nothing."

BLOODLETTING AND LEECHES

Notes from Professor Cassels' lectures refer mostly to drugs and plants. In one lecture he discusses bloodletting, stating that its first effect is to stimulate the system, but as it progresses there is a sedative action. This may be produced in a given area by local scarification and cupping. For the general effect, a vein in the arm or neck is tapped by a lancet. This is done "when the system is under a high grade of action as in some fevers of phlogistic type, apoplexy, epilepsy, etc. Leeches are sometimes employed for local bleeding, congestions and chronic complaints. They drop off from the effect of tobacco fumes, sulphur or vinegar."

Professor Jacob Delamater's lectures show that he possessed a basic knowledge of anatomy and physiology, but the notes contain no unusual angles.

Professor John Delamater, who at this time was 57 years old, delivered lectures and conducted quizzes. The attitude of such a capable teacher to "tubercle" is of interest. Abner Webb quotes him as follows: "Tubercle in scrofula occurs through a predisposition and constitutional habits resulting from the association of old with young people. Intemperate habits, such as exposure to cold, want of exercise, exercising in confined situations, and clotting of food are other causes. It is not contagious, though some have considered it so. The female is more susceptible than the male, the proportion being 13 to 7."

Professor Horace Ackley was at this time only 29 years of age. He gave didactic lectures on anatomy and general surgery, held quiz classes and conducted operation clinics. In one of these clinics he removed a malignant tumor of the jaw. "This was performed," we read, "while the man was in a magnetic sleep, so supposed." Ten days later a letter from this patient was read before the class, stating that "in respect of his being magnetized, that it was true of his operation." That incident certainly did not harm the prestige of the professor of surgery. However, it was not until the session of 1845-46 that Webb began to learn surgery as taught by Ackley. In another book of notes there is a list of operations performed by Professor Ackley. The wide variety of cases, which included many operations on the eye, mark the ability and courage of Ackley's work. One morning, there is a list of eight patients operated upon, five of them having eye operations.

(*Continued in May Issue*)

House Bill No. 51 Clears First Big Hurdle; Is Approved By Insurance Committee; Can Now Be Called up for Vote In House; Lots of Action "Back Home" Essential

AFTER five prolonged hearings and listening to thousands of words of testimony, the Insurance Committee of the House of Representatives, Ninety-Fourth Ohio General Assembly, on Tuesday, March 18, approved HOUSE BILL No. 51, the enabling act for medical service plans, sponsored by the Ohio State Medical Association.

Thus, HOUSE BILL No. 51 has cleared its first big hurdle. However, it has a long journey ahead of it, meaning that all efforts which have been put forth to date for the bill must be doubled and tripled during ensuing weeks.

Before reporting out HOUSE BILL No. 51 and recommending it for passage, the House Insurance Committee inserted a number of amendments, all of which are acceptable to the State Medical Association—in fact, several of the amendments were proposed by the special committee of the State Association which handled the hearings for the Association.

Appended is the text of HOUSE BILL No. 51 as amended by the House Insurance Committee, the amendments appearing in italics.

The special committee appointed by The Council to handle HOUSE BILL No. 51 in the State Legislature is composed of Dr. William M. Skipp, Youngstown, President of the State Association; Dr. Harry V. Paryzek, Cleveland, President-elect; Dr. Parke G. Smith, Cincinnati, chairman of the Committee on Medical Service Plans; and Dr. Barney J. Hein, Toledo, chairman of the Committee on Public Relations and Economics. This committee was ably assisted by Mr. Wayne Stichter, Toledo attorney, as legal counsel.

These men attended all hearings held by the Insurance Committee, except the final hearing on March 18 which was an executive session of the committee. The information and advice which they offered to members of the Insurance Committee played a big part in the final favorable action which climaxed the committee's consideration of HOUSE BILL No. 51.

Also, the State Association owes a debt of appreciation to the Local Legislative Committeemen in Franklin, Hamilton, Clark, Sandusky, Putnam, Huron, Noble, Mahoning, Summit, Henry, and Cuyahoga counties, which counties are represented by members of the House Insurance Committee, for their excellent work in interviewing members of that committee during the weeks when the bill was under consideration.

Now that HOUSE BILL No. 51 has been reported out of committee, it can be placed on the "jitney" calendar in the House for consideration by the House. It is hoped that the bill can be brought to a vote on the floor of the House some time during the first week of April. If the House passes HOUSE BILL No. 51, it will then go to the Senate, where it will be given further hearings by a committee. If acted upon favorably by committee, it will be placed before the Senate for final passage.

It is extremely important that all members of the House and Senate be interviewed immediately by physicians, including Local Legislative Committeemen, while the legislators are at home during week-ends. They should be encouraged to vote for HOUSE BILL No. 51 when it is called up for a vote. Also, physicians should write or phone their legislators on this important matter. In addition, members of the laity should be requested to tell their legislators that they favor HOUSE BILL No. 51 and would appreciate favorable action by the General Assembly. The bill is designed to benefit the public. There is much public support for it. However, it is up to members of the medical profession to encourage citizens generally to make known their attitude to members of the General Assembly.

AMENDED HOUSE BILL 51

(By Margaret A. Mahoney, Cuyahoga County)

As amended and recommended for passage by the House Insurance Committee. Amendments made by Committee appear in italics.

To promote public health and to effect a wider distribution of medical care in this state by authorizing corporations not for profit to establish and operate medical care plans for the benefit of subscribers making periodic payments; to provide for the supervision and regulation of such corporations by the superintendent of insurance; and to prescribe penalties for the violation of the provisions of this act.

Be it enacted by the General Assembly of the State of Ohio:

Section 1. Corporations not for profit organized under the laws of this state, upon compliance with the provisions of this act, shall be authorized to establish, maintain, and operate a voluntary non-profit medical care plan, whereby professional services are provided at the expense of such corporation to such persons or groups of persons as shall become subscribers to such plan under contracts which will entitle each such subscriber to certain professional services by duly licensed physicians and surgeons in their offices, in hospitals, and in the home, and to certain appliances and supplies incidental to such care. The term "professional services" shall not be construed to include services rendered by hospitals.

Section 2. No contract such as mentioned in the foregoing section shall provide for the payment of any cash or other material benefit to a subscriber or his estate on account of death, illness, or injury, nor be in any way related to the payment of any such benefit by any other agency.

Section 3. The board of trustees of any corporation holding a certificate of authority or license from the superintendent of insurance, provided for under this act, shall have representation from the public and from duly licensed physicians and surgeons of this state. *Such board shall consist of fifteen (15) members of whom at least six (6) shall not be physicians and surgeons.*

Section 4. The name of any corporation holding a certificate of authority or license from the superintendent of insurance under this act shall not include the words "insurance", "casualty", "surety", "health and accident", "mutual", or other words descriptive of the insurance or surety business, and such name shall not be so similar to that of any insurance or surety company doing business in this state as to tend to create confusion in identity therewith.

Section 5. Before it may issue any contract or certificate to a subscriber a corporation not for profit desiring to establish, maintain, and operate a medical care plan must obtain from the superintendent of insurance a certificate of authority or license to do so. Each application to the superintendent of insurance for such certificate of authority or license shall be verified by an officer of the corporation, and shall set forth, or shall be accompanied by, the following:

(a) A copy of the corporation's articles of incorporation, and of any amendments thereto, certified by the secretary of state, which shall define with reasonable certainty the territorial boundaries within which such corporation proposes to operate a non-profit medical care plan and the location of the principal office for the transaction of its business;

(b) A copy of the corporation's regulations and by-laws, which shall provide: *(1)* that all duly licensed physicians and surgeons in this state, residing within such territorial boundaries, shall be eligible to render professional services to subscribers under the proposed medical care plan upon compliance with the uniform requirements prescribed by such corporation; *(2) that a subscriber to such plan shall at all times retain the right to select a physician and surgeon of his own choice from among those physicians and surgeons who have agreements, as hereinafter provided, with such corporation for the rendition of professional services to subscribers under such plan; (3) that in case of an emergency, the subscriber may select any physician and surgeon to render him the services which he requires, and in such event such corporation shall pay such physician and surgeon so much of his fee as does not exceed the amount such corporation would be required to pay if such services were rendered by a physician and surgeon having an agreement with the corporation; and (4) that no such agreement entered into between such corporation and a physician and surgeon may be revoked by him prior to its expiration;*

(c) A list of names and residence addresses of all officers and trustees of said corporation;

(d) A description of the medical care plan which the corporation proposes to operate, together with the forms of all contracts or certificates which the corporation proposes to issue under such plan;

(e) A copy of each agreement theretofore entered into between such corporation and duly licensed physicians and surgeons for the rendition of professional services under such plan;

(f) A statement of the assets and liabilities of the corporation;

(g) A statement setting forth the sources of the funds with which the corporation expects to begin operation of such plan, including the name and address of each contributor thereto and the terms upon which such contribution has been or will be made;

(h) An affidavit by the secretary of the state medical board setting forth that he has satisfactory evidence that at least fifty-one per centum (51%) of the duly licensed physicians and surgeons residing and actively practicing in each county lying wholly or partly within such territorial boundaries have agreed to render professional services to subscribers under such plan.

Section 6. The superintendent of insurance shall issue a certificate of authority or license to any corporation filing an application in conformity herewith, upon payment of the fees hereinafter prescribed, and if it appears:

(a) That such corporation proposes to establish and operate a non-profit medical care plan of the type described in Section 1 hereof;

(b) That the terms of the proposed contracts or certificates to be issued to subscribers are fair and reasonable;

(c) That a valid written agreement or agreements have been entered into by such corporation with at least ten (10) duly licensed physicians or surgeons, each of whom agrees thereby to render professional services in accordance with such plan for a period of at least one year, which agreement or agreements shall not be revocable by any such physician or surgeon;

(d) That such proposed plan is established upon a sound financial basis;

(e) That the admitted assets of such corporation are not less than ten thousand dollars ($10,000.00);

(f) That such corporation has a cash surplus of at least five thousand dollars ($5,000.00);

(g) That all the provisions of this act have been complied with.

Upon the receipt by the superintendent of insurance of an application for the issuance of an original certificate of authority or license under this act, the superintendent of insurance shall give notice in writing of such application to each and every corporation holding a certificate of authority or license under this act and in such notice shall set a date for hearing for the purpose of determining whether the certificate or license shall be issued, which hearing shall be held not less than twenty (20) days after the issuance of such notice by the superintendent of insurance. Any corporation entitled to such notice shall have the right to appear and be heard upon the question of the granting or refusing of such application.

Section 7. No amendment of the articles of incorporation of such corporation filed with the secretary of state, as provided by law, shall be effective for the purposes of this act until approved by the superintendent of insurance, and no amendment of the regulations or by-laws, or of the medical care plan, or of the forms of contracts and certificates to be issued under such plan, shall be effective until *approved by the superintendent of insurance.*

Section 8. No corporation holding a certificate of authority or license under this act shall operate a medical care plan outside the territorial boundaries defined in its articles of incorporation or any amendments thereto or shall accept as a subscriber a person residing outside such territorial boundaries; provided, however, that *the employment by a subscriber in case of emergency, pursuant to Section 5, (b), (3), of a physician and surgeon residing outside such territorial boundaries shall not be construed to be an operation of such plan outside such territorial boundaries.*

Should the number of physicians and surgeons in any county having existing agreements with such corporation become less than fifty-one per centum (51%) of the physicians and surgeons residing and actively practicing in such county, such corporation shall discontinue the issuance in such county of contracts or certificates to subscribers, and any renewals thereof, and shall not resume the issuance thereof until the aforesaid fifty-one per centum (51%) requirement has been met.

No such corporation shall issue a contract or certificate, or any renewal thereof, for the rendition of professional services, to any person having no dependents whose income from all sources exceeded nine hundred dollars ($900.00) during the six months next preceding his application for such contract or certificate, or any renewal thereof, or to any person having dependents whose income from all sources, including the income of such dependents, exceeded twelve hundred dollars ($1,200.00) during such six months' period.

Section 9. Every corporation subject to the provisions of this act shall pay the same tax as that levied against domestic insurance companies and shall be entitled to the same exemptions allowed such corporations.

Every such corporation shall pay to the superintendent of insurance the following fees:

For filing a copy of its articles of incorporation, twenty-five dollars ($25.00);

For filing each financial statement, twenty dollars ($20.00);

For each certificate of authority or license, or any certified copy thereof, two dollars ($2.00).

Section 10. Every such corporation shall file a report, verified by an officer of the corporation, with the superintendent of insurance annually on or before the first day of March, as of the last day of the preceding calendar year, on forms prescribed by the superintendent of insurance, which report shall include:

(a) The financial statement of such corporation, including its balance sheet and its receipts and disbursements for the preceding year;

(b) A list of names and residence addresses of all officers and trustees;

(c) The number of subscribers' contracts or certificates issued and outstanding;

(d) The number of duly licensed physicians or surgeons with whom such corporation has existing written agreements of the type described in Section 6(c) hereof, together with copies of all such agreements not theretofore filed with the superintendent.

Section 11. Unless sooner revoked, each certificate of authority or license shall expire on the 31st day of March next following the date of its issue, but shall be renewable for successive periods of one year each, as of the first day of April.

Section 12. Such corporation shall maintain an unearned premium reserve in accordance with the requirements of section 9607-24 of the General Code.

Section 13. Any trustee, officer or member of any corporation subject to the provisions of this act, or any other person, may advance to such corporation any sum or sums of money necessary for the purpose of its business, or to enable it to comply with any requirement of the law. Such moneys, and such interest thereon as may have been agreed upon, not exceeding eight per centum (8%) per annum, shall not be a liability or claim against the corporation, or any of its assets, except as herein provided, and shall be repaid only out of the surplus earnings of such corporation; and, except as otherwise approved and ordered by the superintendent of insurance, no part of the principal thereof shall be repaid until the surplus of the corporation remaining after such repayment is equal in amount to the principal of the money so advanced. Such advancement and repayment shall be subject to the approval of the superintendent of insurance, provided that this section shall not affect the power to borrow money which any such corporation possesses under other laws. No commission or promotion expenses shall be paid by the corporation, in connection with the advance of any such money to the corporation, and the amount of any such unpaid advance shall be reported in each annual statement.

Section 14. The funds of any corporation subject to the provisions of this act shall be invested only in securities permitted by the law of this state for the investment of capital surplus and accumulations of domestic life insurance companies.

Section 15. No person employed by or for a corporation subject to the provisions of this act shall solicit, receive, procure or forward an application for a subscriber's contract unless licensed by the superintendent of insurance under the provisions of section 644 of the General Code of Ohio and the superintendent shall establish a proper classification for the purpose of licensing such person or persons. Unless sooner revoked or cancelled, each license issued hereunder shall expire on the 31st day of March next following the date of its issue.

Section 16. The superintendent of insurance, or a person appointed by him for that purpose, may make an examination of the affairs of any such corporation. Such corporation, its officers and agents, shall submit their books and business to such examination and in every way facilitate it. For the purpose of such examination, the superintendent, or other person so appointed, shall have authority to administer oaths to and examine the officers and agents of such corporation relating to its business and affairs.

Section 17. Any rehabilitation, liquidation, conservation or dissolution of a corporation subject to the provisions of this act shall be conducted under the supervision of the superintendent of insurance, who shall have all the power with respect thereto granted to him under the provisions of law governing the rehabilitation, liquidation, conservation or dissolution of insurance companies generally.

Section 18. The superintendent of insurance shall refuse to renew a certificate of authority or license issued hereunder, or shall revoke any such certificate or license, if it appears:

(a) That such corporation is operating in contravention of its articles of incorporation or any amendments thereto, or of its regulations and by-laws, or of its medical care plan;

(b) That such corporation is unable to fulfill its obligations under its outstanding contracts or certificates issued to subscribers;

(c) That such corporation has failed to maintain a surplus of at least five thousand dollars ($5,000.00);

(d) That the number of duly licensed physicians or surgeons with whom such corporation has existing written agreements of the type described in Section 6(c) hereof is less than one (1) for each five hundred (500) subscribers holding contracts or certificates issued by such corporation;

(e) That such corporation has violated, or has failed to comply with, any of the provisions of this act.

Section 19. The finding of the superintendent of insurance in granting, revoking, renewing, or in refusing to grant, revoke or renew, a certificate of authority or license under the provisions of this act, shall be in writing and shall state the facts upon which his action is based. The superintendent of insurance shall immediately mail a copy of his written finding to the applicant for or holder of such certificate of authority or license and to each corporation holding a certificate of authority or license under this act at the addresses on file in the office of the superintendent. The action of the superintendent of insurance in granting, revoking, renewing, or in refusing to grant, revoke, or renew, such certificate of authority or license, shall be subject to review by appeal to the court of common pleas of Franklin County, Ohio, provided such appeal shall be filed by an interested party, including any corporation holding a certificate of authority or license under this act, within thirty (30) days after such written finding by the superintendent and the giving of notice thereof as aforesaid. Said cause shall proceed as a new civil action, with the right of either party to submit evidence and to appeal, and said court shall have jurisdiction upon reasonable notice to the superintendent of insurance, and after a hearing, to restrain said action of the superintendent, and in the event such restraining order is granted, said cause shall be tried as soon as it can be conveniently heard.

Section 20. Any corporation not for profit holding a certificate of authority or license from the superintendent of insurance under this act shall be exempt from the laws of Ohio governing insurance corporations, except as provided in this act.

Section 21. An employee or employees of the state of Ohio or of any political subdivision or district of the state of Ohio, or of any institution supported in whole or in part by the state, may authorize the deduction from his or their salaries or wages of the amount of his or their subscription payments to any corporation provided for in this act. Such authorization shall be evidenced by an approval of the head of the department, division, office or institution in which such employee or employees may be employed.

In the case of employees of the state of Ohio, such authorization shall be directed to and filed with the auditor of state. In the case of employees of a county, city, village, township or other political subdivision or district of the state of Ohio, such authorization shall be directed to and filed with the auditor or other fiscal officer of such county, city, village, township or other political subdivision or district of the state. In the case of employees of any institution supported in whole or in part by the state of Ohio, such authorization shall be directed to and filed with the auditor or other fiscal officer of such institution.

Upon the filing with him of such authorization, such auditor or fiscal officer shall draw a warrant or warrants in favor of the medical care corporation referred to in such authorization for the amount covering the sum total of the deductions so authorized.

Section 22. Each such corporation may, in its discretion, receive and accept from governmental agencies payments covering all or part of the cost of contracts entered into between such corporation and subscribers. Each corporation may, in its discretion, receive and accept from private agencies, corporations and associations, groups, or individuals payments covering all or part of the cost of contracts entered into between such corporation and subscribers.

Section 23. Whoever violates any of the provisions of this act or shall knowingly make any false statement in any report or statement required by this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished as follows: For the first offense be fined not less than twenty-five dollars ($25.00) nor more than five hundred dollars ($500.00); and for each subsequent offense be fined not less than fifty dollars ($50.00) nor more than five hundred dollars ($500.00), or imprisoned in the county jail or work house not less than thirty (30) days nor more than one year, or both.

Section 24. Duly licensed physicians and surgeons in rendering professional services under a medical care plan operated pursuant to this act shall not be deemed thereby to be guilty of a violation of section 1275 of the General Code. Notwithstanding anything contained in this act or in any such medical care plan, the relationship between a duly licensed physician and surgeon rendering professional services under such plan and such subscriber shall constitute the ordinary relationship of physician and patient; and no action based upon or arising out of such relationship shall be maintained against a corporation operating a medical care plan in compliance with the provisions of this act.

Section 25. The term "duly licensed physicians and surgeons" as used in this act shall be construed to mean persons holding a certificate issued under any one of the following sections of the General Code: 1274, 1282, 1282-1, 1288 and 1292. A corporation holding a certificate of authority or license under this act shall not exclude any duly licensed physician and surgeon from rendering professional services to subscribers under its plan because of the type of certificate issued to him under said sections.

Section 26. Every such corporation shall mail annually to each subscriber a list of the names and addresses of all the physicians and surgeons in the county of the subscriber's residence who have agreements with such corporation under such plan.

Coming Meetings

American Medical Association, Cleveland, June 2-6.

House of Delegates, Ohio State Medical Association, Cleveland, June 3-4.

American Association of Anatomists, Chicago, April 9-11.

American Association of the History of Medicine, Atlantic City, May 4-6.

American Association of Pathologists and Bacteriologists, New York, April 10-11.

American College of Physicians, Boston, April 21 - 25.

American College of Physical Therapy, Washington, D. C., Sept. 1-5.

American Dermatological Association, New Orleans, Apr. 7-11.

American Gastro-Enterological Association, Atlantic City, May 5-6.

American Physiological Society, Chicago, April 16-19.

American Roentgen Ray Society, Cincinnati, Oct. 6-11.

American Society of Biological Chemists, Chicago, April 15-19.

American Society for Clinical Investigation, Atlantic City, May 5.

American Society for Experimental Pathology, Chicago, April 15-18.

American Society for Pharmacology and Experimental Therapeutics, Chicago, April 15-19.

American Surgical Association, White Sulphur Springs, W. Va., April 28-30.

Annual Conference, Committee on Medical History and Archives, Columbus, April 4.

American Urological Association, Colorado Springs, May 19-22.

Association of American Physicians, Atlantic City, May 6-7.

Association for the Study of Internal Secretions, Atlantic City, May 2-3.

Federation of American Societies for Experimental Biology, Chicago, April 15-19.

National Gastroenterological Association, New York, May 13-16.

National Tuberculosis Association, San Antonio, Texas, May 5-8.

Northern Tri-State Medical Association, Tiffin, April 8.

Ohio State University Post-Collegiate Medical Assembly, Columbus, April 15-17.

Society for the Study of Asthma and Allied Conditions, Atlantic City, May 3.

Open Offices

Physicians who have opened new offices recently in Ohio include the following: Dr. Thomas F. Betts, Findlay; Dr. J. W. Burrows, Port Clinton; Dr. Robert W. Gregg, Wakeman; Dr. Herman H. Insel, Lorain; Dr. Gordon M. James, Marietta; Dr. Harry Kaufman, Newton Falls; Dr. M. W. Livingston, Sunbury; Dr. R. I. McPhail, Ohio City; Dr. John O. Perry, Bradner; Dr. Glen A. Sheppard, Ottawa; Dr. R. E. Stivison, West Unity; Dr. E. R. Westbrook, Warren.

Trips to the Altar

Recent marriages of Ohio physicians include the following: Dr. Elizabeth G. Brill, Norwood, and Mr. Wilson McKinley Smith, Cincinnati; Miss Mary Frances Knoll, Van Wert, and Dr. Kindrick T. Edmonds, Delphos; Miss Catherine Schultz, Fostoria, and Dr. Joseph A. Radecki, Toledo; Miss Helen Keyser, Leetonia, and Dr. William E. Sovik, Youngstown; Miss Betty Marguerite Wendt, Oberlin, and Dr. James Tilden Marr, Cleveland.

Interesting Health Facts Revealed in Selective Service Statistics; Status of Students, Interns and Residents Discussed; More Ohio Physicians Ordered to Duty

STATISTICS based on the results of physical examinations of Selective Service recruits during the first four and one-half months of the program are now available at the state and national headquarters of the Selective Service System. They present a fairly accurate picture of the general health of the male population within the age limits of 21 and 36 years.

As was predicted in some quarters, the two chief causes for rejection of draftees are insufficient teeth and defective vision. This is true in both Ohio and the nation at large. Of the 1,187 men rejected at two of the four Fifth Corps Area induction centers, Columbus and Cleveland, during the period from January 20 to March 10, a total of 361 could not meet dental requirements, and 180 had inadequate vision. These two causes of rejection plus defective hearing (88) accounted for more than half the failed examinations at those two Ohio posts.

OTHER LEADING CAUSES

Other leading causes of rejection at induction centers and the number of men turned down at the Columbus and Cleveland posts during the 30-day period mentioned above are: Gonorrhea, 53; feet (pes planes) 45; tuberculosis, 42; hernia, 32; 'acute conditions (recent operations) 32; heart, 31; constitutional psychopaths, 30; chronic sinusitis, 29; nasal obstruction, 27; underweight, 25; bones, 21; and neurological conditions, 20.

No data are as yet available for the leading causes of rejection resulting from local physical examinations in Ohio, but the national listing and the respective percentages are: Teeth, 17; cardiovascular, 13; musculo-skeletal, 10; eyes, 9; genitalia, including venereal disease, 6; mental and nervous, 6; ears, nose, and throat, 6; hernia, 5; feet, 4; and lungs, 3.

FIGURES ON LOCAL EXAMINATIONS

Certain facts about local draft examinations in Ohio are noteworthy, however. During the month of February physicians attached to local boards examined 17,133 prospective recruits. Of this number, 9,543 were found physically fit for full military service, 3,014 were found to be qualified for limited service because of physical defects, and 3,222 were completely disqualified.

State Selective Service officials have kept a running tabulation of the number of men rejected by local examiners because of dental deficiencies and tuberculosis. Of the 17,133 examined in February, 1,243 were found to have too few teeth to qualify for service, while 114 cases of active tuberculosis were turned up.

It is significant that the number of men with tuberculosis turned down by local examiners in Ohio approximates only six-tenths of one per cent, despite the fact that the men eligible for Selective Service fall in the age group in which the disease is highly prevalent. The state figure compares very favorably with the national average of 3 per cent, and the number of cases of tuberculosis discovered at army induction centers in Ohio is correspondingly lower than the national figure.

By the middle of March, Ohio physicians had examined about 69,000 registrants whose numbers had been called. Of this number 26,693 men had actually gone into army service. Ohio's contingent in army camps was considerably augmented by the state's large quota for March, which was 12,402 white men and 715 Negroes.

REJECTIONS DURING FEBRUARY

The number of Ohio draftees rejected for physical reasons or classified for limited service during February was 36.39 per cent of all men examined. This percentage varies several degrees from week to week, but over a period of time it remains constantly close to that figure, which means that slightly more than one out of three is the Ohio score for men physically disqualified for full service with defense forces.

As has been noted before, the number of men rejected for syphilis is relatively small among the white group. Not only is this true of local examinations but also of examinations at induction centers. By March 14 the laboratories of the Ohio Department of Health had performed serological tests for 69,235 prospective recruits for the expanded army. Positive reactions were obtained from 2,144 blood specimens, or 3.09 per cent of the total. White men totaled 64,457, and of that number 1,267 were reported positive. This is a percentage of only 1.9 for that group. Of the 4,778 Negro specimens tested, 877, or 18.3 per cent, were positive.

Concerning the comparatively larger number of gonorrhea cases discovered by induction examiners, Selective Service officials point out that a large proportion of these are contracted between the original examination and the time the men report at induction centers. Many, also, are in too early stages to be detected.

DENTAL PROBLEM ATTACKED

Because of the preponderance of dental deficiencies among the causes of rejection, Col. L. G. Rowntree, chief of the medical division, National Selective Service Headquarters, told the National Conference on Medical Service, held in Chicago recently, that the following measures are being contemplated: Provision of a special chart showing dental requirements, which will be distributed to all local examiners; addition of the services of a dentist to every board desiring it; and the creation of a national dental advisory committee.

* * *

STATUS OF STUDENTS VITAL

In all recent discussions of the medical aspects of Selective Service the urgency of granting medical students additional deferment becomes increasingly apparent. Following a recent conference on this topic in the offices of the American Medical Association, a telegram was sent to Clarence Dykstra, Director of the Selective Service System, urging his consideration of the following suggestions: That because the five-year program will require annual enrollment in the army, navy, and public health service of about 3,500 medical graduates, the education of physicians must be continued at the present level and without interruption; that local draft boards be asked to defer medical students throughout the country until they obtain their degrees; that students who have been accepted for admission to medical schools during the 12 months preceding enrollment be granted deferment to complete their education; and that the problem cannot be solved by increasing enrollment in medical schools because that would create an unnecessary strain on facilities and would produce no additional physicians until 1946.

The telegram did not request that the section of the Selective Service law prohibiting blanket deferments be obviated or repealed because of the far-reaching implications of any such action. Believing that at least 3,500 of the 5,200 medical students who graduate annually will enroll for a year's training, the officials who sent the communication to Mr. Dykstra asked only that medical students be classified as being in occupations essential to public health and security.

HOSPITALS CONFRONTED WITH PROBLEM

A critical situation also is facing the hospitals because of the large numbers of internes and residents holding Reserve Corps commissions who are being called to active duty. In response to queries regarding this problem Col. B. E. Brewer, executive officer, Fifth Corps Area headquarters, issued the following statement to the Ohio Hospital Association:

"It is the War Department policy to avoid placing Medical Reserve Officers who are residents in hospitals on orders for extended active duty as long as other Medical Reserve officers are available. However, due to a shortage of Medical Reserve Officers in the Ohio Military Area, it will probably be necessary to place all officers who are now residents in Ohio hospitals on orders for extended active duty some time during the Spring or Summer.

"It is suggested that you issue necessary instructions to all hospitals to be prepared to release their residents who are reserve officers when they are placed on orders by this headquarters.

"It is also suggested that all hospitals be advised not to consider using their internes who are reserve officers for residencies, as it is believed at this time that it will be necessary to place all (on orders). In this connection, attention is invited to the fact that two-year interneships are not considered and that all Medical Corps reserve officers who have completed one year's service as internes or who have had one year's experience in the practice of medicine are eligible for active duty."

FEW MEDICAL RESERVE OFFICERS LEFT

According to figures obtained from Fifth Corps Area headquarters, the supply of available physicians in the Medical Corps Reserve in Ohio will probably be exhausted by May 1. When the Reserve was called to active duty, there were 866 physicians on the list. Of that original number 278 are now on extended active duty, and 111 are still available, the mortality among the remainder having been due to failure to pass physical examinations, over-age, or resignations.

Because of the shortage of physicians in the Medical Corps indicated by the above figures, Maj. Frank J. Vokun, Medical Reserve Instructor stationed at Fort Hayes, Columbus, stated that voluntary enlistment of physicians under the age of 35 is being urged. Physicians under 32 may still volunteer for one year's training in the regular army, he said. Also on the Reserve list in Ohio are 40 interns, but they will not be available until July 1.

THOSE CALLED IN PAST MONTH

Ohio medical reserve officers called to active duty during the past month and their assignments, and those who had been called but later had their orders revoked, are as follows:

Ft. Jackson, S. C.: Lt. Col. Henry Rothschild Lesser, Toledo; Major William Byrne Morrison, Columbus; Capt. Michael Raymond Zeiger, Cleveland Heights; Capt. Richard Wagner Weiser, Cincinnati; Capt. Louis Eugene Lieder, Cleveland; 1st Lt. Sander Cohen, Cincinnati (transferred from Camp Shelby); 1st Lt. David Myers

Creamer, Bellaire; 1st Lt. Amanto Primo D'Amore, Masury; 1st Lt. William Harrison Eberle, Ashtabula; 1st Lt. Samuel Epstein, Struthers; 1st Lt. Wilbur Graham Fisher, Columbus; 1st Lt. Nathan Gold Gordon, Akron; 1st Lt. Marcel Greenberg, Cleveland; 1st Lt. Theodore Anthony Gross, Cleveland; 1st Lt. Edgar Reese Hargett, Springfield; 1st Lt. David Taylor, Yellow Springs; 1st Lt. Orin Ross Yost, Akron; 1st Lt. Robert Francis Koors, Dayton; 1st Lt. Robert Henry Wahl, Dayton; 1st Lt. Paul Lawrence Suhay, Cleveland.

Randolph Field, Texas: 1st Lt. Francis Robert Grogan, Urbana; 1st Lt. Laurence Otto Fasoldt, Glendale; 1st Lt. Louis Lytton, Cleveland, Heights.

Ft. Thomas, Ky.: Major Samuel LeRoy Bossard, Gallipolis; Major Frederick Clyde Potter, Cuyahoga Falls; Lt. Col. Royal George Grossman, Lakewood; 1st Lt. Arthur Smith Dutton, Put-In-Bay, (after one-month refresher course at Carlisle Barracks, Pa.), and 1st Lt. Arthur Adolf Pimsner, Lakewood (after refresher course at Carlisle Barracks).

Ft. Bragg, N. C.: Capt. Guy Augustus Ginn, Springfield; 1st Lt. Donald Lee Rose, Dayton (after one-month refresher course at Carlisle Barracks, Pa.).

Camp Davis, N. C.: Major Adolphus William Foertmeyer, Cincinnati; Capt. Paul Herdman Jones, Stockdale; Capt. Louis Jay Goldblatt, Youngstown.

Camp Claiborne, La: 1st Lt. Earl Perry Knisely, Columbus (after refresher course at Carlisle Barracks, Pa.).

Camp Livingston, La.: 1st Lt. Charles Elmer Dillard, Cincinnati; 1st Lt. Robert Henry Brown, Cincinnati.

Camp Grant, Ill.: 1st Lt. Samuel Kenneth Kerson, Lancaster.

Ft. McClellan, Ala.: Lt. Col. Theodore Burstein, Canton; Lt. Col. Adam Benjamin Denison, Shaker Heights; 1st Lt. Marvin Gerald Sadugor, Cleveland (after one-month refresher course at Carlisle Barracks, Pa.).

Camp Blanding, Fla.: Capt. John Tipton Gibbons, Celina; Capt. Thomas Michael Kirk, Dayton; Capt. Clarence Ignatius Kuntz, Fremont.

Camp Shelby, Miss.: Capt. Albert Ralph Miller, Cleveland Heights (after one-month refresher course at Carlisle Barracks, Pa.); 1st Lt. Samuel Lester Greenberg, Steubenville; 1st Lt. Donald Irwin Minnig, Akron; 1st Lt. Walter Musta, Macedonia; 1st Lt. Roland Aaron Reich, Centerville; 1st Lt. Samuel Joseph Restifo, Cleveland; 1st Lt. Maxwell Spencer Udelf, Cleveland; 1st Lt. Louis Ulin, East Cleveland; 1st Lt. John Herbert Graham, Cleveland; 1st Lt. Howard Marston Hunter, Hamilton; 1st Lt. Milton Caleb Oakes, Lexington; 1st Lt. John Burget Stineman, Cincinnati; 1st Lt. Isadore Meschan, Cleveland.

Camp Forrest, Tenn.: (after refresher course at Carlisle Barracks, Pa.): Capt. John Henry Nauman, Martins Ferry; Capt. Harold Coy Schmuck, East Canton; Capt. Ivan Campbell Smith, Youngstown; 1st Lt. Albert Vincent Black, Dayton; 1st Lt. Arthur Robert Cohen, Springfield; 1st Lt. Albert Eden Cremer, Lima; 1st Lt. Carl C. Francis, Cleveland; 1st Lt. Orris Williard Hoffman, Franklin; 1st Lt. Henry Thomas Lapp, Utica; 1st Lt. Harold William Law, Warren; 1st Lt. Lawrence Lazarus, Cleveland; 1st Lt. Harry Herman Leuchtag, Akron; 1st Lt. Ernest Frank Lindenmayer, Ashtabula; 1st Lt. Richard Adolphus Lucas, Columbus; 1st Lt. George Isaac Martin, Dayton; 1st Lt. William Howard Maryanski, Akron; 1st Lt. Frank Lawrence Meany, Lakewood; 1st Lt. Walter Samuel Price, Phillipsburg; 1st Lt. Robert Gibson Cook, Cincinnati; 1st Lt. Eugene Paul Fromm, Cincinnati; 1st Lt. William Louis McGowan, Cincinnati.

Ft. Benjamin Harrison, Ind.: 1st Lt. Jack Meltzer, Cleveland (after refresher course at Carlisle Barracks).

Corps Area Service Command, Columbus: Capt. Leslie L. Lawrence, Canton; 1st Lt. Sidney Elmer Wolpaw, Cleveland Heights.

Fort Hayes, Ohio: 1st Lt. Sim Harry Galinson, Dayton (after one-month refresher course at Carlisle Barracks, Pa.).

Toledo Induction Station: 1st Lt. Robert Wilson Pocotte, Toledo; 1st Lt. Harold C. Zeigler, Toledo.

Orders revoked: Major Meyer Fineberg, Cleveland, previously ordered to Camp Davis, N.C.; Lt. Col. Franklyn A. Rice, Cleveland, previously ordered to Ft. Knox, Ky.; Major Milton E. Jones, Columbus, previously ordered to Camp Davis, N.C.; Major Edward King, Cincinnati, previously ordered to Camp Davis, N.C.; Major Charles Hodge Bailey, East Liverpool, previously ordered to Camp Shelby, Miss.

Cincinnati—Dr. Earl D. Bond, director of the Institute of the Pennsylvania Hospital, discussed "The Treatment of the Psychoneuroses at the Institute of the Pennsylvania Hospital", at a meeting of the Cincinnati Society of Neurology and Psychiatry, March 3, at the University Club, Cincinnati. Dr. Philip E. Piker, Cincinnati, spoke on "The Adaptation of the Central Nervous System to Alcohol", at a meeting of the society, February 20.

Program for Eighth Annual Post-Collegiate Assembly, College of Medicine, Ohio State University, on April 15, 16 and 17

THE Ohio State University College of Medicine cordially invites all Ohio physicians to attend its Eighth Annual Post-Collegiate Assembly at Columbus, Tuesday, Wednesday and Thursday, April 15, 16 and 17. Features of the comprehensive program include symposiums conducted by members of the faculty on pertinent topics and seminars in which visiting physicians may discuss their problems.

A special study course for the American College of Physicians will be conducted during the week by the Department of Medicine, Division of Research Medicine. All physicians attending the Assembly are welcome to attend these sessions on the 16th and 17th, when sub-topics will be presented on the general theme, "Clinical Medicine from the Hematologic Viewpoint".

SYMPOSIUM ON TRANSFUSION

On Wednesday afternoon there will be a symposium on "Blood Transfusion", at which Dr. Paul I. Hoxworth, resident surgeon, Cincinnati General Hospital, will present movies and lecture on "Organization and Operation of a Blood Bank and Volunteer Donor Bureau for Cincinnati".

Dr. Henrik Dam, Ph.D., discoverer of Vitamin K, and associate professor, Bio-chemical Institute, Copenhagen, Denmark, will be the guest speaker on Thursday afternoon April 17. His subject will be: "Vitamin K, (a), Its General Significance in Biochemistry; (b), Its Role in Human Pathology and Its Application in Therapeutics."

The Annual Alpha Omega Alpha lecture will be given Tuesday evening, April 15, in the University Chapel. This will be an open meeting, with the public invited.

CLASS REUNIONS

Class reunions on Wednesday evening, April 16, and fraternity banquets on Thursday evening, April 17, will complete the homecoming events celebrating the 107th year of continuous charter existence of the College of Medicine.

Members of the Post-Collegiate Assembly committee are: Dr. Russel G. Means, chairman; Dr. Jonathan Forman, Dr. Earl H. Baxter, Dr. Charles A. Doan, Dr. Verne A. Dodd, Dr. I. B. Harris and Dr. Grant O. Graves.

The following physicians have been named Class Reunion Chairmen: 1891 and prior classes —Dr. L. M. Sifrit, Dr. Cyrus M. Rambo and Dr. R. M. Hughey; 1896—Dr. W. D. Murphy, Dr. Charles E. Turner; 1901—Dr. Robert A. Kidd, Sr., Dr. Harley H. Brelsford, Dr. Michael P. Clouse; 1906—Dr. James A. Beer, Dr. O. D. Tatje; 1911—Dr. E. J. Simms, Dr. Frank C. Anderson, Dr. B. R. Shoemaker; 1916—Dr. E. F. Peinert, Dr. Paul A. Davis, Dr. John R. Shoemaker; 1921—Dr. Dan G. Sanor, Dr. Virgil G. Damon; 1926—Dr. Herbert D. Emswiler, Dr. Andrew J. Nemecek; 1931—Dr. Robert G. Smith, Dr. Ruth H. St John; 1936—Dr. Charles R. Baber, Dr. Ralph A. Munslow.

OFFICERS AND PROGRAM

Officers of the Alumni Association of the Ohio State University College of Medicine are: Dr. Nial L. Burrell, Springfield, president; Dr. Robert C. Austin, Dayton, first vice-president; Dr. Wm. L. Skipp, Youngstown, second vice-president; Dr. Jonathan Forman, Columbus, editor and historian; Dr. Russel G. Means, Columbus, secretary, and John B. Fullen, Columbus, executive secretary, Ohio State University Alumni Association.

The complete program follows:

TUESDAY EVENING, APRIL 15

Alpha Omega Alpha

Annual Lecture

8:00 P.M. University Chapel—Old Main Building "Communicable Disease Control, Past Accomplishments and Possibilities in the Future", by Dr. James E. Perkins, director, Division of Communicable Diseases, New York State Department of Health and associate professor of preventive medicine and public health, Albany Medical College, Albany N.Y. Public cordially invited. Dr. George M. Curtis, presiding.

WEDNESDAY, APRIL 16

Hamilton Hall—Medical College Building

Moderator—Dr. George M. Curtis, Chairman, Surgical Research Division.

9:00 A.M.—Dr. Italo D. Puppel, Disturbances of Calcium Metabolism in Hyperthyroidism.

9:15 A.M.—Dr. Harold T. Gross, Calcium Therapy in Hyperthyroidism.

9:30 A.M.—Dr. Arthur D. G. James, The Morbidity of Non-Toxic Nodular Goiter.

9:45 A.M.—Dr. H. C. Haynie, Chemotherapy Treatment of Pneumonia.

10:00 A.M.—Dr. Nicholas H. Holmes, The Use of X-Rays in the Diagnosis of Placenta Previa.

10:15 A.M.—Dr. Deane C. Epler, Sensitivity to Parenteral Liver Injections.

10:30 A.M.—Discussion and questions.

10:45 A.M.—Dr. Irvin L. Libecap, The Use of Radioactive Substances as Tracers.

11:00 A.M.—Dr. Emerson R. Hatcher, The Collection of Plasma for Transfusion.

11:15 A.M.—Dr. Robert S. Srigley, Intussusception Due to Meckel's Diverticulum.

11:30 A.M.—Dr. Louis C. Roettig, An Analysis of Acute Injuries to the Spleen.

11:45 A.M.—Discussion and questions. Intermission.

12:00 Noon—Dr. Robert F. Daly, The Prophylactic and Therapeutic Use of Adrenal Cortical Substance in Surgical Shock.

12:15 P.M.—Dr. Elgie K. Johnson, Sodium Pentothal Anesthesia in Minor Surgery.

12:30 P.M.—Dr. Charles R. Baber, The Use of Intubation in Intestinal Obstruction.

12:45 P.M.—Dr. Robert A. Keating, The Treatment of Syphilis.

1:00 P.M.—Luncheon Intermission.

2:00 P.M.—Combined Session—University Hospital (second floor).

WEDNESDAY, APRIL 16

University Hospital

Special Course No. 8 for
The American College of Physicians

"CLINICAL MEDICINE FROM THE HEMATOLOGIC VIEWPOINT"

Department of Medicine—Division of Research Medicine—Director, Dr. Charles A. Doan.
Lecture Room (second floor) Starling Loving Hospital.

Assembly Guests Welcome.

DISEASES PRIMARILY INVOLVING THE SPLEEN.

9:00 A.M.—The Spleen and the Erythrolytopoietic Equilibrium; Congenital and Acquired Hemolytic Jaundice, Dr. Charles A. Doan.

10:00 A.M.—The Spleen and the Leucolytopoietic Equilibrium; Primary Splenic Granulopenia; Banti's Syndrome, Dr. Bruce K. Wiseman.

11:05 A.M.—Primary Splenic vs. Secondary Allergic Thrombocytopenic Purpura, Dr. Charles A. Doan.

12:00 Noon—Blood Volume Studies and Splenic Reservoir Functions, Dr. Carl V. Moore (guest lecturer), assistant professor of medicine, Washington University, St. Louis, Mo.; formerly National Research Council Fellow and assistant professor, Department of Medicine, Ohio State University College of Medicine.

12:30 P.M.—Surgical Considerations in the Treatment of Diseases Involving the Spleen, Dr. George M. Curtis.

1:00 P.M.—Luncheon Intermission.

2:00 P.M.—Combined Afternoon Session—University Hospital Assembly Room.

SYMPOSIUM ON BLOOD TRANSFUSION

2:00 P.M.—General Considerations: Indications; Contraindications, Dr. Charles A. Doan.

2:35 P.M.—Organization and Operation of a Blood Bank and Volunteer Donor Bureau for Cincinnati (illustrated with motion pictures), Dr. Paul I. Hoxworth (guest lecturer), resident surgeon, Cincinnati General Hospital.

3:40 P.M.—Isoagglutination; the Significance of Groups M & N: Medico-Legal Applications, Dr. Lawrence H. Snyder.

4:35 P.M.—The Roles of Whole Blood, Plasma and Dried Plasma in a Transfusion Service, Dr. Paul I. Hoxworth.

EVENING—CLASS REUNIONS.

THURSDAY, APRIL 17

Hamilton Hall, Medical College Building

Topics for General Discussion.

9:00 A.M.—The Value of Urological Investigation in the Diagnosis of Abdominal Disease. Moderator, Dr. W. N. Taylor. Drs. R. A. Keating and E. K. Johnson.

10:00 A.M.—An Improved Method of Treatment of Common Abdominal Complications. Symptomatic relief of postoperative nausea, gas pains, obstructive duodenal ulcer, biliary colic, advanced carcinoma of the stomach, etc. Moderator, Dr. Frank E. Hamilton.

11:00 A.M.—Problems Encountered in Obstetrical Practice. Moderator, Dr. Andrews Rogers and obstetrical staff.

12:00 Noon—Luncheon Intermission.

1:00 P.M.—Diseases of the Biliary Tract. Medical and Surgical Approaches to Diagnosis and Treatment. Moderator, Dr. John W. Means. Dr. C. J. DeLor.

2:00 P.M.—Uses of New Chemotherapeutic Agents, i.e., Sulfathiazole. Moderator, Dr. L. H. Van Buskirk.

Chemotherapy in Surgery, Dr. Gilman D. Kirk.

Chemotherapy in Urology, Dr. L. J. Roth.

Chemotherapy in Pneumonia, Dr. Ben Arnoff.

Laboratory Aids or Checks in Chemotherapy, Dr. Ralph M. Hartwell.

3:00 P.M.—Gastro-Intestinal Allergy. Moderator, Dr. Jonathan Forman.

Indigestion, Associated with Asthma, Dr. Wm. F. Mitchell.

Acute Gastro-Intestinal Allergic Reactions, Dr. John H. Mitchell.

Mucus Colitis, Dr. Clark P. Pritchett.

Miscellaneous Gastro-Intestinal Manifestations. Canker Sore; Peptic Ulcers; Bleeding; Pruritis Ani; Intestinal Toxemia. 15 minutes for discussion.

4:30 P.M.—Guest Lecture. Campbell Hall (second building north of Medical College). Presiding, Dean J. H. J. Upham.

"Vitamin K, (a) Its General Significance in Biochemistry, (b) Its Role in Human Pathology and Its Application in Therapeutics", by Henrik Dam, Ph.D., associate professor, Bio-chemical Institute, University of Copenhagen, Denmark.

Physicians, students and members of allied professions are cordially invited.

7:00 P.M.—FRATERNITY BANQUETS.

THURSDAY, APRIL 17

Hamilton Hall, Medical College Building

SYMPOSIUMS

Question period at end of each hour.

9:00 A.M.—Present Status of Contagious Disease—Prevention by Immunization. Moderator, Dr. Earl H. Baxter.

Prevention of Smallpox and Measles, Dr. John E. Brown, Jr.

Prevention of Diphtheria and Tetanus, Dr. M. L. Ainsworth.

Scarlet Fever Prevention, Dr. S. D. Edelman.

Whooping Cough Prevention, Dr. J. P. Farson.

10:00 A.M.—Head Injuries. Moderator, Dr. Harry E. LeFever.

Anatomy and Physiology of the Brain in Relation to Trauma, Dr. Harrison S. Evans.

Signs and Symptoms Following Head Injuries, Dr. Geo. T. Harding.

Diagnosis of Complications, Dr. Roy Secrest.

Treatment of Head Injuries, Dr. LeFever.

11:00 A.M.—The Management of Acute Injuries of the Chest. Moderator, Dr. George M. Curtis.

The Effect of High Explosives on the Lungs, Dr. James D. King.

The Control of Hemorrhage in Thoracic Wounds, Dr. R. W. Zollinger.

The Significance of Pneumothorax in Thoracic Injuries, Dr. C. T. Surington.

Crushing Injuries to the Chest, Dr. Frank E. Hamilton.

12:00 Noon—Luncheon Intermission.

1:00 P.M.—Problems and Treatment in Cardiac Failure. Moderator, Dr. George I. Nelson.

Management of Rheumatic Heart Disease, Dr. Robert C. Kirk.

Management of Syphilitic Heart Disease, Dr. C. C. Sherburne.

The Significance of the Cold-Pressor Test, Dr. Donald L. Mahanna.

Management of Hypertensive and Arteriosclerotic Heart Disease, Dr. R. W. Kissane.

2:00 P.M.—The Recognition of Common Affections of the Large Bowel. Moderator, Dr. Verne A. Dodd.

Significance of Bleeeding, Dr. Walter H. Hamilton.

Importance of Functional Disturbances, Dr. I. B. Harris.

Diagnostic Signs of Colitis, Dr. S. A. Hatfield.

3:00 P.M. — Gynecology — Hypo and Hyper-Glandular Problems in General Practice. Moderator, Dr. Philip J. Reel.

Further Clinical Observations in the Use of Stilbesterol, Dr. Zeph J. R. Hollenbeck.

Some of the Problems of Adolescence, Dr. T. F. Lewis.

The Value of the Laboratory Diagnostic

Tests to the Physician in General Practice, Dr. Emmerich Von Haam.

Resumé of the Value of Commercial Products Used in Endocrinology, Dr. Reel.

4:30 P.M.—Guest Lecture, Dr. Henrik Dam, Copenhagen, Denmark. Campbell Hall. (See previous announcement.)

7:00 P.M.—FRATERNITY BANQUETS.

THURSDAY, APRIL 17

University Hospital Lecture Room, Second Floor

THE WHITE BLOOD CELLS IN DISEASE
(Part of F.A.C.P. Course)

9:00 A.M.—Neutropenia and Leukocytosis, Dr. Charles A. Doan.

10:00 A.M.—Myelogenous Leukemia, Dr. Bruce K. Wiseman.

11:05 A.M.—Polycythemia Rubra Vera: Symptomatic Polycythemia, Dr. Doan.

12:00 Noon—Clinical Pathological Conference. Basophil Granulocyte Leukemia, Dr. M. L. Beard, Dr. Doan, Dr. H. L. Reinhart.

1:00 P.M.—Luncheon Intermission.

2:00 P.M.—The Lymphadenopathy Problem, Opening Discussion, Dr. Wiseman.

3:00 P.M.—Hodgkin's Disease, Dr. Doan.

3:40 P.M.—Infectious Mononucleosis, Lymphatic Leukemia, Leucolymphosarcoma, Dr. Wiseman.

Nu Sigs Honor Dr. McCally

Dr. William C. McCally, Cleveland, assistant clinical professor of surgery, was honored by the chapter of the School of Medicine of Western Reserve University of Nu Sigma Nu at the annual student initiation banquet Friday, Feb. 21. J. William Derr, junior president of the chapter, presented Dr. McCally with an alumni trophy pin, and in an informal speech cited him as an all-around good pal to the students. Dr. McCally was recently named as director of the surgical division of Base Hospital No. 4, with the rank of Lieutenant Colonel, which unit is ready to be mobilized by the government. Dr. Clyde L. Cummer presided at the banquet, and Dean Torald Sollmann and Dr. Harold N. Cole spoke.

Columbus—Recent addresses by Dr. Jonathan Forman, Editor of *The Ohio State Medical Journal*, include: "Health and Economics", Virginia Wright Mothers Guild, Columbus; and "Better Nutrition for Defense", Chillicothe Lions Club.

Only a few more weeks remain before members of the Woman's Auxiliary to the American Medical Association will be arriving in Cleveland for their annual convention, June 2-6. Headquarters for the Auxiliary will be the Hotel Carter. Requests for hotel reservations should be addressed to Dr. Edward F. Keiger, Chairman of the Committee on Hotels and Housing, 1604 Terminal Tower, Cleveland.

Industrial Medicine — Hygiene Institute To Be Held in Pittsburgh, May 5-9

A postgraduate institute of industrial medicine and industrial hygiene will mark the 26th annual meeting of the American Association of Industrial Physicians and Surgeons and the second annual meeting of the American Industrial Hygiene Society at the William Penn Hotel, Pittsburgh, May 5-9. Scores of pertinent papers and discussions are scheduled on the medical and engineering phases of employe health protection.

A series of important dry clinics will be held at Mercy Hospital on the first day of the meeting, Monday, May 5. One of the highlights of the day will be a consideration of the diagnosis and treatment of "Industrial Backs". Another will be a discussion of pneumonia and its treatment, with special reference to the use of some of the newer drugs.

Subjects to be discussed on Tuesday include: "Practical Results of Periodic Physical Examinations"; "Relation of Trauma to Disease"; "Contact Dermatoses"; "Sequalae of Head Injuries". Wednesday morning will be devoted to recent research on such subjects as carbon monoxide poisoning; effects of radiation from an ophthalmologic viewpoint; and various aspects of industrial lead exposures and industrial lead poisoning. Tuberculosis problems will be the main topic for discussion Wednesday afternoon.

A banquet will be held on Wednesday evening at which Dr. Irving Abell, Louisville, Ky., former president of the American Medical Association, and chairman of the Health and Medical Committee of the Federal Security Agency, will speak on "The Role of Industrial Medicine and Hygiene in National Defense."

Industrial ventilation problems will be considered on Thursday morning, industrial hygiene dust studies in the afternoon, and miscellaneous subjects in the evening. Friday morning's session includes a report on dermatitis control in a mass production industry.

The Institute will conclude its symposium on Friday afternoon with discussions of a number of subjects, including phosphorus toxicology and controlled radium hazards.

Women's Field Army Against Cancer Will Hold Its Annual Enlistment Campaign During April; Activities Reviewed

THE support and active cooperation of the medical profession is being sought again by the Ohio Division, Women's Field Army of the American Society for the Control of Cancer, as it enters its annual April enlistment campaign. Marshaling the women of the state behind its slogan, "Fight Cancer with Knowledge," the Field Army anticipates Ohio's largest enlistment in 1941.

The Ohio Division of the Field Army intends to expand its educational efforts to teach the public that early cancer can frequently be cured. A fundamental principle of this program is that all educational material must first be approved by the medical profession before it can be released.

ORGANIZED IN 15 COUNTIES

The Field Army is now organized in 15 Ohio counties, divided into regions identical to those of the Ohio State Medical Association, which has approved the program, and its organization will be extended throughout the state as rapidly as is feasible. In many of the counties advisory committees have been formed by the medical societies to assist officials of the Field Army in its educational program.

April is selected as the annual enlistment campaign month in Ohio and in the nation as a whole. It was designated Cancer Control Month by a Congressional resolution and is so declared each year by the President. The goal set for Ohio during the drive is 68,000 members, based on the national organization's ideal of one member for each 100 population.

MUCH LITERATURE DISTRIBUTED

During 1940 the Field Army distributed 75,000 pieces of educational literature in Ohio. These attractively prepared pamphlets and dodgers attempt to teach the lesson that cancer need not be fatal if it is diagnosed and treated early enough, that surgery, X-ray, and radium therapy are the only proven methods of cure, and that there are five "warning signals" which should send a person to his family physician: A lump in the breast or elsewhere, abnormal discharge from body cavities, a sore that does not heal in reasonable time, change in the shape or color of warts and moles, and loss of weight accompanied by indigestion and sometimes aversion to meat.

As the Field Army expanded last year, more than 2,000 members enlisted in the Ohio Division. Exhibits were arranged at several large lay gatherings, among them the Ohio State Fair and the Hamilton County Fair. Educational material about cancer control was distributed from these exhibits. Physicians speaking under the auspices of the Field Army addressed a number of lay groups, and the popular film, "Choose to Live," was shown throughout the state on programs arranged by the Field Army.

NEW COMMANDER CHOSEN

Late in 1940 Miss Belle Greve, director of relief in Cleveland, was named Commander of the Ohio Division, succeeding Mrs. G. A. Vincent, of Bloomdale. Miss Greve's leadership may be interrupted in the near future, since she has been invited to head the refugee work in Greece and will accept that invitation if difficulties of travel do not prevent. In that case, she will ask for a leave of absence from the Field Army.

Leaders of the Ohio Division gathered in Columbus on March 11 to map plans for the April enlistment drive and to report on the work of the Field Army in their counties and districts. About 75 attended the meeting, which was opened with talks in the morning and continued with a luncheon and group discussion of projects and educational technics in the afternoon.

THOSE WHO SPOKE

Among those who addressed the Ohio Division officials were: Mrs. John W. Bricker, wife of the Governor and honorary chairman of the State General Committee; Dr. R. H. Markwith, State Director of Health and a member of the State Executive Committee; Miss Greve; Mrs. J. N. Harvey, of Huntington, W. Va., District Vice Commander; Dr. Carl A. Wilzbach, Cincinnati Health Commissioner and Executive Committee member; and Dr. Lawrence A. Pomeroy, of Cleveland, chairman of the State Executive Committee.

Other members of the State Executive Committee are: Dr. Edgar C. Baker, of Youngstown, and Mrs. Ralph W. Hoffman, of Columbus, whose office at 1542 W. First Ave. serves as state office for the Field Army. E. S. Curtis, of Cleveland, is treasurer of the Ohio Division. District vice commanders are: Mrs. Gilbert Dilley, of Akron; Mrs. Marguerite G. Tremaine, of Cleveland; Miss Ann Houck, of Toledo; Mrs. C. T. Telfair, of Wilmington; and Mrs. Hamilton Frazine, of Cincinnati.

The price of enlistment is one dollar. Proceeds are used entirely to carry on the educational program of the Field Army. Funds are prorated to the local, state, and national organizations, and the money is utilized for both the expense of printed materials and films and the cost of administration.

Hospital Facilities, and Their Utilization, Greater in 1940, Report of A.M.A. Council Reveals; Ohio Figures Cited

HOSPITAL facilities and their utilization were greater in 1940 than in any other year, both in Ohio and in the nation as a whole, according to the annual presentation of hospital data by the Council on Medical Education and Hospitals of the American Medical Association, published in the March 15 issue of *The Journal of the A.M.A.*

Sixty-five more hospitals were registered in 1940 than in 1939, the report shows, bringing the national total of registered hospitals to 6,291. The average daily patient census was 1,026,171. The report reveals the total of hospital beds in the country is 1,226,245, which is an increase of 31,219 beds or the equivalent of adding an 85-bed hospital every day in 1940.

MORE THAN 10,000,000 HOSPITALIZED

The total number of patients admitted to all hospitals in the United States in 1940 was 10,087,548. This does not include the 1,214,492 babies born in hospitals, which figure represents a gain of 114,779 over the previous year.

The number of hospitals approved by the Council for training interns was 730. There were 8,182 internships available with 615 of them vacant December 31. In 1940 there were 5,097 students graduating from approved medical schools.

The report of the Council showed that a greater percentage of hospital facilities was used in 1940 than in any previous year. The proportion of occupied beds in general hospitals increased to 70.3 per cent from 69.2 per cent in 1939. This marks the first time it has risen over 70, and it is in marked contrast to the 59.9 per cent occupancy of 1933.

WHAT IS SATURATION POINT?

"Where is the saturation point?" asks the Council. "What is a reasonable supply of facilities per given unit of population . . . ? General hospitals cannot have their beds 100 per cent occupied. As an emergency institution a general hospital does not have patients waiting in line. Time is required to prepare a room after discharge of a patient. Rooms, wards, and even whole floors in buildings must be closed for renovation and repairs."

Attempting to answer its own questions about the maximum satisfactory percentage of occupancy, the Council points out that no hard and fast rule can be laid down which will be good for all individual cases. The best informed quarters, the report says, believe between 75 and 85 per cent is the optimal figure.

Of the 6,291 hospitals registered by the Council, 4,432 were listed as general. Ownership of these general hospitals is listed as follows: Two hundred and sixty-seven federal; 56 state; 237 county; and 40 city-county, making a total of 835 publicly owned; 872 church; 1,146 non-profit associations; 948 owned by individuals and partnerships; and 311 by profit-making corporations.

Of the 65 hospitals added to the registration list during the year, 27 were governmental and 38 non-governmental. In the governmental group the bed capacity increase was 28,543, and in the non-governmental group it was 2,676.

In compiling the 1940 report the Council on Medical Education and Hospitals and the American College of Surgeons used a combined questionnaire for the first time. Thus the gathering of data required by these two cooperating agencies was facilitated and duplication of effort was avoided. Hospitals fully approved by the college in 1940 totaled 2,261 as against 2,155 in 1939. The approved list represents a bed capacity of 652,684. Approval by the surgical group indicates specific endorsement for educational purposes, with qualifications determined by observation, inspection, and comparison with definite requirements for intern training and residencies.

DATA ON OHIO HOSPITALS

The Council registered 253 Ohio hospitals in 1940, which is three more than the figure for 1939. Their bed capacity was 56,426, and their average census 48,762. They admitted 487,022 patients during the year. Registered Ohio hospitals have a total of 3,098 bassinets, and in 1940 a total of 68,814 hospital births was reported in the state.

Ohio hospitals classified by control are as follows: federal, 7; state, 23; county, 26; city, 20; church, 42; non-profit association, 99; individual and partnership, 19; and corporation, 17.

Classification of Ohio hospitals by service is as follows: general, 153; nervous and mental, 33; tuberculosis, 23; maternity, 8; eye, ear, nose, and throat, 1; children's, 4; orthopedic, 3; isolation, 2; convalescent and rest, 5; departments of institutions, 19; and others, 2.

BEDS PER 1,000 POPULATION

Ohio has 2.9 beds in registered hospitals per 1,000 population, according to the report. This is rather low in the list of states but cannot be considered a criterion because of the number of special hospitals maintained for nationwide use in some states. The District of Columbia, for example, has 10 beds per 1,000 population, but they are used in many instances by federal employes from throughout the country. Among states comparable to Ohio, Indiana has 2.5 beds per 1,000 population, Pennsylvania has 3.5, Illinois has 3.6, and Michigan has 4.2.

Ohio is eighth in the rating of states according to percentage of hospital bed occupancy, having an average of 73.2.

APPROVED FOR INTERNSHIP

The following Ohio hospitals, numbering 42, are approved for internship: City, Peoples and St. Thomas Hospitals, Akron; Aultman and Mercy Hospitals, Canton; Bethesda, Christ, Cincinnati General, Deaconess, Good Samaritan, Jewish and St. Mary Hospitals, Cincinnati; City, Fairview Park, Lutheran, Mt. Sinai, St. Alexis, St. John's, St. Luke's St. Vincent's Charity, Woman's, and University Hospitals, Cleveland; Mt. Carmel, St. Francis, Starling Loving University and White Cross Hospitals, Columbus; Huron Road Hospital, East Cleveland; Good Samaritan, Miami Valley and St. Elizabeth's Hospitals, Dayton; Mercy Hospital, Hamilton; Memorial and St. Rita's Hospitals, Lima; City Hospital, Springfield; Flower, Lucas County, Mercy, St. Vincent's, Toledo, and Woman's and Children's Hospitals, Toledo; Youngstown and St. Elizabeth's Hospitals, Youngstown.

Hospitals in Ohio approved for residencies in specialties number 37. They are: Children's, City and St. Thomas Hospitals, Akron; Mercy Hospital, Canton; Christ, Children's, Cincinnati General, Deaconess, Good Samaritan, Hamilton County Tuberculosis, Jewish, Longview State Hospitals, Cincinnati; City, Cleveland Clinic Foundation, Glenville, Mt. Sinai, St. Alexis, St. Ann's Maternity, St. John's, St. Luke's, St. Vincent's Charity, and University Hospitals, Cleveland; Children's, Columbus State, Starling Loving University Hospitals, Franklin County Sanatorium, Grant, and White Cross, Columbus; Miami Valley Hospital, Dayton; Huron Road Hospital, East Cleveland; General Hospital, Mansfield; Toledo State and Lucas County General Hospitals, Toledo; Cleveland Tuberculosis Sanatorium, Warrensville; Harding Sanitarium, Worthington, and St. Elizabeth's and Youngstown Hospitals, Youngstown.

Toronto Alumni Plan Reunion

The Cleveland medical alumni of the University of Toronto are arranging a reunion on the evening of June 4 for visiting alumni attending the A. M. A. convention. The local alumni committee will be happy to hear from other Toronto alumni, residing in Ohio, who may be in Cleveland at that time. Write to Dr. W. J. Abbott, 10515 Carnegie Ave., Cleveland.

Third Annual Session of Medical History Committee Scheduled for April 4

The Committee on Medical History and Archives of the Ohio State Archaeological and Historical Society, of which Dr. Jonathan Forman, Columbus, is president and Robert G. Paterson, Ph.D., Columbus, is secretary, will hold its Third Annual Session at Columbus, on Friday, April 4. The tentative program follows:

Ohio Medical History of the Period 1835-1858 (Continued)

1. The Introduction of Anaesthesia Into Ohio—Howard Dittrick, M.D., Cleveland.
2. The Development of Nursing in Ohio—Anne L. Austin, R.N., associate professor of nursing, Western Reserve University, Cleveland.
3. The Organization of the Ohio State Medical Society and Its Relation to the Ohio Medical Convention—Donald D. Shira, M.D., Columbus.
4. Epidemics and Their Medical Treatment or "Bleeding" in Ohio—David A. Tucker, Jr., M.D., Cincinnati.
5. Jared Kirtland, M.D., Naturalist—George M. Curtis, M.D., Columbus.
6. The Reformed Botanics and Their Worthington School—Jonathan Forman, M.D., Columbus.
7. Local Boards of Health in Ohio During This Period—Robert G. Paterson, Ph.D., Columbus.
8. Eclectic Medicine—Ralph B. Taylor, M.D., Columbus.
9. Research Aids to American Medical History—Philip D. Jordan, associate professor of history, Miami University, Oxford.

A. M. A. Golf Tourney, June 2

The American Medical Golfing Association will hold its 27th annual tournament at the Cleveland Country Club and Pepper Pike Club, Cleveland, Monday, June 2. Members may tee off from 7:30 A.M. to 2 P.M. Thirty-six holes of golf will be played in competition for the 50 trophies and prizes in eight events. The Cleveland Golf committee is headed by Dr. John B. Morgan, assisted by Drs. William J. Engel, Farrell T. Gallagher and Dr. F. W. Merica. Living past-presidents of the Association include Dr. Thomas Hubbard, Ashtabula, and Dr. Charles Lukens, Toledo. All male fellows of the American Medical Association are eligible and cordially invited to become members of the A.M.G.A. Write the executive secretary, William J. Burns, 2020 Olds Tower, Lansing, Mich., for application blank. Only active Fellows of the A.M.G.A. may compete for prizes in the tournament. Participants are required to present their home club handicap, signed by the club secretary, at the first tee on the day of play. No handicap over 30 is allowed.

Do You Know - - -

Compulsory health insurance bills are being considered by the New York, California, Oregon and Washington legislatures.

* * *

One-sixth of the population of Washington, D.C., carries the trichinosis parasite, a four-year study by the Zoology Division of the United States Public Health Service has disclosed.

* * *

Five unlicensed naprapaths in Columbus were recently found guilty of violation of the Medical Practice Act and fined a total of $300 by Police Judge Ben L. Pfefferle.

* * *

According to the Chicago Tribune, the insistence of the United States Trucking Corporation that a truck driver involved in five accidents in the last year have his eyes examined led to a strike of 300 union driers, it became known when the company filed a $100,000 damage suit against local 807 of the International Brotherhood of Teamsters.

* * *

During 1940, there were 249 claims filed with the State Industrial Commission for compensation under the Silicosis Law. In that same period, 83 silocosis claims were allowed and 113 disallowed.

* * *

On Saturday afternoon, February 15 in the presence of a distinguished gathering of hospital executives and friends, a portrait of Right Reverend Monsignor Maurice F. Griffin, Cleveland, senior member of the Board of Trustees of the American Hospital Association, and former president of the Ohio Hospital Association, presented to the American Hospital Association by an anonymous donor, was unveiled in the Bacon Library of the Association.

* * *

Deaths of infants under one year of age, exclusive of still births, totaled 108,846 in 1939, according to a recent report of the Bureau of the Census, U. S. Department of Commerce. This was in comparison with 116,702 similar deaths the year previous and represented a reduction in the ratio per 1,000 live births from 51 to 48. The rate in 1934 was 60; in 1929, 68; in 1924, 71; and in 1918, 101.

* * *

Plans are being considered by the Bethel Village Council to purchase and erect a bronze memorial tablet in honor of the late Dr. William E. Thompson, who died February 19, 1940, at age 105, after having practiced there for 80 years.

Dr. Jonathan Forman, Columbus, Editor of *The Ohio State Medical Journal*, will be one of the speakers of the nine weeks' public lecture course on "Conservation", being sponsored by Akron University. He will lecture, April 23, on "The Health of Our Nation—in the Hands of the Farmer".

* * *

Dr. J. N. Paterson, formerly of Cincinnati, who went to Florida in 1938 to become director of the State Board of Health Laboratories, has been appointed assistant state health officer of that state.

* * *

Dr. George M. Wheatley, formerly director of the School Health Service of the New York City Department of Health, has been appointed an assistant medical director of the Metropolitan Life Insurance Company, New York, N. Y. His work "will have to do primarily with the relationships between the Company's Welfare Division and medical societies, preventive medical movements, and health services (official and voluntary)."

* * *

The British War Relief Society in New York City, at the urgent request of the British Hospitals Association, has cabled $25,000 to London to establish a subterranean plant for the production of radon, an emanation product of radium that can be effectively used as a substitute. Radiologists in England have been forced by German bombers to abandon most of their clinical work with radium owing to the danger of losing radium, although research is proceeding in other branches of medicine despite the war.

* * *

Grove Patterson, editor of *The Toledo Blade*, was one of five laymen recently elected to honorary membership in the Toledo Academy of Medicine, in recognition of their cooperative attitude toward medicine. The others honored were: Waldo M. Bowman, Dr. Philip C. Nash, Dr. H. H. M. Bowman and Harold H. Hartley.

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Nathan G. Richman, Cleveland, who died February 17, one of the three brothers who founded the Richman Bros. Co., left large benefits to educational and charitable institutions. Beneficiaries include: Western Reserve University School of Medicine, for research; Mt. Sinai Hospital, Cleveland, for the purchase of surgical equipment; and the Dr. Harry Goldblatt Research Fund at Western Reserve University.

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Problem of Sufficient Interns Needs Careful Study

For some time a considerable number of Ohio hospitals have had difficulty in obtaining a sufficient number of interns to fill the quota set by each institution. Since last Fall this situation has become more acute, because of the National Defense Program. There is a real need for mighty serious discussion of this question.

Some good points to serve as a basis for thinking on this matter were set forth in a recent editorial in *The Journal of the American Medical Association.* We were especially impressed with the suggestion that members of the attending medical and surgical staffs may have to revise their methods of procedure somewhat in order to meet the problems resulting from a curtailed house staff. The editorial in part read as follows:

"At present, probably more than ever previously, a need for clear thinking on the subject of the supply of interns in relation to the demand by hospitals for their services is desirable.

"Some hospitals have been unable to secure any interns and others have not secured their usual number. The demand exceeds the supply. The size of senior classes in approved medical schools has remained almost constant since 1934, while the number of appointments available each year in approved hospitals has steadily increased. Although statistics are not yet available, the number of graduates of European schools seeking internships in this country has diminished greatly within the past year. While the number of interns recruited from this source has never been large, the recent decrease has served to accentuate the disproportion between supply and demand.

"The approved medical schools with their present facilities cannot increase the size of their classes without sacrificing accepted educational standards. Furthermore, the function of medical schools is to educate physicians to supply the medical needs of the country, not merely to develop young physicians to meet the demand of hospitals for low cost house staff personnel. Until approved medical schools are able to train more students (assuming that more applicants could qualify for admission) the supply of prospective interns will not increase.

"Even the present flow of graduates from approved schools into internships may be reduced by the selective service act. The crucial needs of the preparation for national defense, especially the necessity of expanding the Army and Navy Medical Corps, will no doubt reduce still further the number of graduates available for hospital service beyond the first year of intern training. This will affect hospitals which have internships more than one year in length as well as those which have extended training services in the form of residencies.

"No doubt graduates will continue to prefer appointments in hospitals that provide the best training for internships and residencies. These are the hospitals in which attending staffs are not only unusual in ability but, even more important, most willing to give their time to the instruction of the house staff. There will probably also be continued preference for hospitals with large charity wards, especially those with long established educational services.

"With these considerations clearly before them, the boards of hospitals which have experienced difficulty in attracting the usual number of interns and residents may examine their problem and prepare to make the necessary adjustments. Physicians in many localities have taken for granted the provision, by the administration of hospitals, of medically trained personnel capable of relieving the physicians of certain time consuming procedures necessary to the care of patients. The attending physicians should realize two principles of basic importance in this connection: First, interns and residents are employed on an apprenticeship basis whereby the compensation for their services is mainly the instruction they receive from the attending staff. Second, the duties performed by house staff personnel are properly the responsibility of the individual attending physicians, not that of the hospital administration. In the absence of sufficient house staff assistance, the attending men may well find it necessary to perform these tasks for some or even all of their patients."

Too much of what we read of medicine today is negative in tone, full of accusations and refutations, surcharged with demands for radical change and fantastic accomplishment. — Milwaukee Medical Times.

Two Meanings of Term "Group Medicine" Leads to Confusion

A great deal of confusion in the thinking about organized systems for rendering medical service results from the two meanings of the word "group". In Ohio the medical profession speaks of "voluntary group medical care plans," meaning plans for which patients may subscribe in groups but in which all physicians may participate if they wish to.

On the other hand, there are those who regard "group medicine" as the grouping together of several physicians to form a "team" which undertakes to cure all the ills of an unlimited number of patients at flat rates. With this sort of group practice the medical profession cannot be in accord.

There is a distinction which must be clearly drawn. To physicians, who are familiar with the ground, the difference is plain enough, but laymen are talking about these things nowadays, and they can easily become confused about the double meaning of this important word.

A lot depends on what kind of a group you are talking about. Because of the current effort in Ohio to obtain passage of House Bill No. 51 we feel it is imperative to stress the wisdom of plans which permit groups of patients to pool resources so that they might have easier access individually to the fullest extent of medical facilities.

The man who knows it all and gets nothing from the Society, reminds one of that little dried-up miniature of humanity, the prematurely senile infant, whose tabetic marasmus has added old age to infancy.—Osler.

How Social is Socialism? Current Events Cause One to Wonder

One of the most convincing attacks on socialism in practice came recently from a medical journal. Deftly using the editorial weapons of the sarcastic phrase and the ironic jibe, *The New York State Journal of Medicine* exposes socialism's lack of sociability. We think the editorial is worth reprinting here:

"How social is socialism? The obvious answer seems to be: about as companionable as the socialists! In the recent past, socialism was perhaps farthest advanced in Germany, Austria, the Irish Free State, and the Scandinavian countries. In 1936 France came under the control of a socialist government for better or worse and Spain overthrew its semisocialist government in favor of fascism.

"Somehow the cooperative movement among peoples seems to revert to the old-fashioned practice of blood-letting as a cure-all, a practice discarded as inefficient, ineffective, and outmoded years ago by the medical profession. Hence it has been with some misgivings perhaps that physicians have watched the carefully fostered growth of socialism in this country. For physicians are really very sociable people. They get around among the folks quite a lot.

"Among the people of this democracy the physicians circulate—among the friendly, sociable people riding in automobiles, laughing, dancing, going to church, voting in free elections, eating butter, drinking beer, arguing about anything and everything under the sun, listening to radios, attending prize fights, working to produce useful and beautiful things, living together in sociability. Among these people physicians move yet awhile.

"And in their hearts they wonder about this thing called socialism, this cooperative movement which has produced all the fine things of life in modern Europe; the fine burning of books, the magnificent bombings of Ethiopians, the exquisite torturing and murder of Jews, the elegant collapse of France, the splendorous civil war in Spain, the sublime demolition of architectural landmarks in Britain, the esthetic conscription of labor, the graceful starvation of human beings, the imposing exile of human herds, the superb walling-in of the 'begats' of Abraham.

"And in their minds they ponder about this thing called socialism, this cooperative movement in this hemisphere which commences now to produce many things in America: Social Security, and guns and tanks; compulsory sickness insurance, and men marching in uniform in peacetime, and debt, and warplanes; the socialization of medicine, and warships, torpedoes, bombs; and lease-lend bills and taxes for the happy folk to pay so that they can be more expeditiously socialized in the shadow of democracy.

"How social is socialism? Your guess is as good as ours. You have eyes to see and ears to hear with. Look in the open book of history; listen, and you will hear the dull tramp of marching feet."

If there is such a thing as a profession as a concept distinct from a vocation it must consist in the ideals which its members maintain, the dignity of character which they bring to the performance of their duties and the austerity of the self-imposed ethical standards.—Law Notes.

"The Doctor's Dilemma" a Dilemma for Even the Show Critics

Several Ohio cities have had an early opportunity to see "The Doctor's Dilemma," the witty satire by George Bernard Shaw which Katherine Cornell is currently reviving. By the time this issue of *The Journal* is distributed, the play will have run several weeks on Broadway and will either be well on the way to becoming a smash hit or will show promises of becoming what the show world calls a "turkey". Whatever happens to it, the play is of no little interest to the medical profession because it is more a commentary on English medicine at the turn of the century than it is a drama.

In a piece which should convince physicians that newspapermen are not as hard boiled as they appear to be, William F. McDermott, *Cleveland Plain Dealer* columnist, is prompted by seeing the play to make some comments apropos of authors who write diatribes against doctors. McDermott has no use for "puny authors," many of them neurotics, who run to the physician all too frequently seeking cures for ills real or imaginary and then turn around and pen lines of ungrateful criticism. "Of all people, authors in general are the least competent to pass judgment on the value and achievements of the medical profession," says the columnist.

Shaw, however, does not fall into this general classification, McDermott believes, because his unusually healthy constitution, augmented perhaps by his strict diet regimen, has given him

NOW'S THE TIME TO BECOME FELLOW OF THE A.M.A.

Since the 1941 session of the American Medical Association will be held in Cleveland next June 2-6, every eligible Ohio physician will want to attend as many sessions as possible of that great medical gathering. To be "eligible" to attend, a physician must be a Fellow of the A.M.A. Right now is the time for each physician to take care of this important matter by making formal application for Fellowship by writing directly to the American Medical Association, Chicago. Every member of the American Medical Association (every member of the Ohio State Medical Association) is eligible to apply for Fellowship. Cost of Fellowship is $8.00 per year, the same as the subscription to The Journal of the A.M.A. and when a physician becomes a Fellow he receives The Journal of the A.M.A. free.

OHIO DOCTORS SHOULD APPLY NOW FOR FELLOWSHIP IN THE A.M.A.

a life comparatively free from illness. "But he is, or was, an ardent Socialist," the columnist concludes, "and 'The Doctor's Dilemma' is essentially not a confession of mistrust in doctors, but a plea for the socialization of medicine."

Although we find Mr. McDermott's reasoning very cogent, and we are certainly in agreement with the major portion of his column, we question this last statement—in spite of our exaggerated allergy to propaganda for socialized medicine. Only one line in the play made any reference to government control of medicine, and that was spoken by a physician who would naturally see the glum side because he had an active case of tuberculosis. The other doctors in the cast each represented distinct personal types. There was the surgeon who essayed to cure all ills by cutting, the coldly scientific researcher who forgot that patients are human, the advertiser whose shingle proclaimed "Consultation Free—Cure Guaranteed," and the practitioner of half-truths who held that any vaccine or serum could be given for any condition as long as it "stimulated the phagocytes."

And, finally, there was the able and competent general practitioner, the steady family doctor who was skeptical of new things until proven but not averse to change. Of the seven doctors who were on the stage through most of the play, this was the man whom the audience came to respect most. He was the leavening influence, the one whose solidarity showed up the foolish extremes of the others.

The question naturally arises: If Shaw had intended to indict the whole profession, if he proposed to point out in this play that medicine should be subjected to state control because private practice had failed, would he have included in the cast of characters the lovable and admirable general practitioner? No, in our opinion, this one physician represented the playwright's idea of what a good doctor should be like—and he was not an employe of the state. (Incidentally, the time of "Doctor's Dilemma" was before the Panel System was begun in England.)

Regardless of which view you take concerning the play, the moral to this discussion remains: Propaganda for revolutionizing the practice of medicine may be found anywhere. It may be entertainingly subtle (as it is in Shaw's play if that's what he intended), or it may be disgustingly naive. It may be made to appeal only to the most cultivated intellects, or it may be put out in words of one syllable for consumption by the near-illiterate. It may be disguised as literature or art, or it may be frankly indoctrinated material bearing the stamp of the propagandist. Wherever it is found, and in whatever form it may be put up, it is still a destructive force, and the medical profession must recognize it as such.

It is not necessary for us to talk about our faults; we all have them. The important thing is to recognize them ourselves, and then try to do something about them.—Brigham Young.

Wise Is the Physician Who Knows When To Hold His Tongue

At this writing, the legal lights in Washington are still feverishly at the task of proving or disproving the charge that certain members of the medical profession and its professional organizations are criminally guilty of conspiring to restrain trade. The probable outcome of the trial, of course, cannot be commented on, but even in its early stages one thing became increasingly evident: namely, a physician cannot be too cautious about what he says in supposedly off-the-record conversation or what he puts in writing.

The experience in Washington has shown that letters between physicians may be considered confidential at the time they are written and may contain statements considered quite innocent, but when they are subpoenaed and introduced as evidence in open court, they take on a very different appearance.

The same is true of friendly, and hence unguarded, conversation. Comments dropped in a hospital corridor or across the luncheon table may be forgotten shortly after they are made, but, in Washington, at least, they have a nasty way of cropping up several years later under a barrage of questions by counsel.

It appears then, that circumspection is a prime **desideratum** when you are talking about anything that may be controversial. "Anything you say can be held against you!"

A physician is an unfortunate gentlemen, who is every day called upon to perform a miracle, namely, to reconcile intemperance with health.—Voltaire.

Quite True; Let Them Define the Objectives and Standards Sought

"If the government," says an editorial in the *Dayton Herald*, "is trying to reduce the medical profession to the status of a trade in the hope of providing better care for the lower income group, then its lawyers and its witnesses should at least have some idea of the standard they are trying to achieve."

In our opinion, the editor has something there. His implication that some of the recent efforts at reform have been stabs in the dark calls attention to the importance of well-defined objectives in any program. In defending the traditional principles of practice the medical profession does so out of the conviction that only thus can the best medical care be provided to the public. When and if somebody satisfactorily disproves that basic assumption, the profession will admit its error. After all, the physician's primary interest is the consequent of disease. Terminology and mechanisms are only incidental.

The present breathing space should not be considered as terminating the danger of state medicine or even postponing it indefinitely. . . . If the profession demonstrates its ability to supply medical needs efficiently and inexpensively, the government will have no excuse for asking the nation to support the vast political bureaucracy which is the inescapable concomitant of state medicine.—The New York Medical Week.

A Service Valuable to Physicians and Areas Needing Physicians

An important factor in the equitable distribution of medical care is placing the right physician against the right background. No formula or laboratory test has been devised as yet to indicate exactly when the ideal circumstance has been reached, but a commendable effort in that direction is the "Locations Available and Locations Wanted" service which is maintained by the Ohio State Medical Association.

In the headquarters office of the Association two separate listings are constantly revised and published at periodic intervals. One includes communities and institutions in Ohio where there are openings for physicians, and the other lists the Ohio physicians who wish to make a change or to start private practice. Both have often proved invaluable to physicians as well as to communities in need of additional medical care facilities. This is a little heralded and oft forgotten service of your State Association, but one whose importance cannot be underestimated. If you want to make a change or know somebody who does, or if you know of an opening for a physician, take advantage of these lists of "Locations Available and Physicians Seeking New Locations".

What the National Defense really requires in the form of new or improved devices for medical care is a matter on which military authorities—not social reformers should be consulted.—Creighton Barker, M.D., executive secretary, The Connecticut State Medical Society.

Last Call for Tri-State Meeting

Many Ohio physicians are planning to be in Tiffin, Tuesday, April 8, for the Sixty-Eighth Annual Meeting of the Northern Tri-State Medical Association. The meeting will begin at 9:00 A.M., continuing throughout the day with scientific addresses, the concluding talk to be made at 8:15 P.M., by Dr. Elliott P. Joslin, Boston, Mass. Other speakers are: Dr. Frederick F. Yonkman, Detroit, Mich.; Dr. Carl D. Camp, Ann Arbor, Mich.; Dr. W. D. Gatch, and Dr. William N. Wishard, Jr., Indianapolis, Ind.; Dr. A. D. Ruedemann, Dr. E. Perry McCullagh and Dr. Roy W. Scott, Cleveland, and Dr. George M. Curtis, Columbus. The complete program was published in the March issue of *The Journal*, page 278.

Cleveland—Dr. J. C. Placack recently began his 18th year as president of the Anti-Tuberculosis League of Cleveland and Cuyahoga County.

Message from the President

A JOB FOR EVERY MEMBER! WILL YOU DO YOUR PART?

By WM. M. SKIPP, M.D., Youngstown

PROGRESS which has been made so far with respect to House Bill No. 51, our enabling act, demonstrates that the officers and committeemen of the State Association and many officers and committeemen of local medical societies are on the job and are making real sacrifices to accomplish things which are of vital importance to the entire medical profession of the state and to the health of Ohio's citizens generally.

Nevertheless, the fine work of this particular group of physicians is not enough to achieve the goals which we have set for the State Association. They need the active support of all members of the Association.

There are many bills pending in the Ohio General Assembly, exclusive of House Bill No. 51, which are of great interest to the medical profession. These measures, if they become laws, will affect physicians as individuals and the health of the public generally. Every physician should do something on behalf of the good measures and express opposition to the bad ones.

Let me suggest to each fellow member of the State Association: Keep in touch with your county society legislative committeemen. Find out what is going on in the General Assembly. Volunteer your help. See, write or phone members of the House of Representatives and State Senate of your county and district about pending legislative proposals. Let the legislators know you are in touch with legislative matters pertaining to public health and the practice of medicine. Furnish them with information and advice. Encourage them to look to you for data and suggestions. Attend your county society meetings where these matters are discussed. Take part in the discussions. Translate words into action.

Our interest in legislative matters is a program which is the business of the entire medical profession and each individual physician. Only through organized, concerted action can we do a real job.

Interested in Bowling Tourney?

Efforts to form an American Medical Bowling Association are being initiated by Dr. L. W. Bremerman, of Los Angeles. A communication from him states that bowling has come to be such a popular recreation among physicians that he believes formation of such a national group is justified. It is his hope to stage a bowling tourney at Cleveland in connection with the American Medical Association Meeting in June, with one team of physicians from each state competing. At Dr. Bremerman's suggestion, the editor of *Medical Sports Review*, a publication of Mead Johnston Co., is contemplating a special supplement to that magazine dealing with this project. Dr. Bremerman may be communicated with at 1709 W. Eighth St., Los Angeles, Calif.

Essay Prize Announced

Announcement is made of the annual "Foundation Prize" essay contest of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons. Eligible contestants include only: (a) interns, residents, or graduate students in obstetrics, gynecology or abdominal surgery, and (b) physicians, (with an M.D. degree) who are actively practicing or teaching obstetrics, gynecology or abdominal surgery. Manuscripts must be limited to 5,000 words. Physicians interested in competing for this $150 award, should write the secretary, Dr. Jas. R. Bloss, 418 Eleventh St., Huntington, W. Va., for copies of the detailed rules governing the contest. All manuscripts must be in the hands of the secretary by June 1.

In Memoriam

Frank E. Bard, M.D., Cleveland; Cleveland University of Medicine and Surgery, 1897; aged 75; died February 13. Dr. Bard retired in 1930 after having practiced in Cleveland and Mantua for 25 years. He was a member of the Masonic Order. A daughter and two sons survive.

Clark Stetson Bogart, M.D., Kane, Pa.; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md., 1914; aged 50; former member of the Ohio State Medical Association and the American Medical Association; died February 16. Dr. Bogart formerly practiced in Cleveland. During the last World War he was medical officer with the British Expeditionary Force, and later was attached to the 37th Division of the A.E.F. Dr. Bogart was a member of the American Legion.

Edward Leo A. Brown, M.D., Dayton; Medical College of Ohio, Cincinnati, 1897; aged 71; died February 20. Prior to moving to Dayton, Dr. Brown practiced in several sections of Darke County, including Burkettsville, Ithaca and Stelvideo. He had been in practice for 39 years, until his retirement six years ago. His widow, a daughter, two sons and three sisters survive.

Claude Adelbert Burrett, M.D., New York, N. Y.; Cleveland-Pulte Medical College, 1905; aged 63; member of the Medical Society of the State of New York; Fellow of the American Medical Association and the American College of Surgeons; died March 4. Dr. Burrett, president of the New York Medical College and Flower Hospital since 1922, was dean of the old College of Homeopathic Medicine at Ohio State University from 1915 to 1922. He was a member of the Alpha Kappa Kappa and Phi Gamma Delta fraternities. His widow, two daughters and two sons survive.

Benjamin Lawrence Casey, M.D., Toronto; Ohio State University College of Medicine, 1914; aged 50; member of the Ohio State Medical Association and the American Medical Association; died March 8. Dr. Casey practiced in Toronto for 25 years. During the World War he served as a first lieutenant in the Medical Corps of the U. S. Army. Dr. Casey was a former officer of the Jeffeson County Medical Society and was actively interested in civic affairs. He had served as safety director of Toronto, and was a member of the Methodist Church, Masonic Order, American Legion and Beta Theta Pi. Surviving are his widow and two daughters.

Frank E. Detrick, M.D., Quincy; Medical College of Ohio, Cincinnati, 1906; aged 65; member of the Ohio State Medical Association and the American Medical Association; died March 4. Dr. Detrick retired several years ago after having practiced in Quincy for many years. Surviving are his widow, a daughter, three sons, two sisters and a brother.

Carl Ellsworth Evans, M.D., Newark; Ohio Medical University, Columbus, 1903; aged 62; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; died February 26. Dr. Evans practiced in Newark for 38 years. He was a member of Nu Sigma Nu and the Masonic Order. His widow and two sisters survive.

Edson Almeron Freeman, M.D., Akron; Rush Medical College, University of Chicago, 1914; aged 55; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 13. A member of the Summit County Medical Society since 1915, Dr. Freeman was a Councilor for that society in 1940-41. He had practiced in Akron for 26 years. Dr. Freeman was a member of the staff of Akron City Hospital.

Angus M. Frew, M.D., Hudson; Hospital College of Medicine, Louisville, Ky., 1898; aged 68; died February 12. Dr. Frew had been director of physical education at Western Reserve Academy for the past 15 years. His widow survives.

Earl Stanley Haas, M.D., Marathon; Eclectic Medical College, Cincinnati, 1909; aged 55; member of the Ohio State Medical Association and the American Medical Association; died February 17. Dr. Haas practiced in Clermont County for 25 years. Surviving are his widow, two sisters and two brothers.

John Stewart Hagen, M.D., Cincinnati; Eclectic Medical College, Cincinnati, 1898; aged 64; member of the Ohio State Medical Association and the American Medical Association; died March 5. A former member of the State Medical Board, Dr. Hagen practiced in Cincinnati for 43 years. He was a senior staff member of Bethesda Hospital and one of the founders of Seton Hospital. From 1900 to 1912 Dr. Hagen was chief milk inspector for Cincinnati and from 1914 to 1927 he was chief police and fire surgeon. During the World War, he served overseas as a captain in the Medical Corps of the U.S. Army, attached to Base Hospital No. 25. Dr. Hagan was a former chairman of the Hamilton County Republican Executive Committee. He was a member of the Masonic Order and the Elks. Surviving are his widow, two sons—Dr. John S.

Hagen, Jr., and Dr. Spencer Hagen, Cincinnati, and a sister.

William Hartman Heinz, M.D., Toledo; Western Reserve University School of Medicine, Cleveland, 1877; aged 85; died February 11. A native of Tiffin, Dr. Heinz retired several years ago, after having practiced in Toledo for many years. He was the last surviving member of the class of 1877 of Western Reserve University School of Medicine. Surviving are his widow, four daughters, a son and three sisters.

John Dennis Herron, M.D., Canton; Western Reserve University School of Medicine, 1887; aged 81; former member of the Ohio State Medical Association and the American Medical Association; died February 3. Dr. Herron retired a few years ago, after having practiced in Canton for 21 years and in New Cumberland for 33 years. He was a member of the Methodist Church. His widow survives.

Edgar McMillen Ickes, M.D., Fremont; Western Reserve University School of Medicine, 1901; aged 67; former member of the Ohio State Medical Association and the American Medical Association; died February 21. Dr. Ickes practiced in Fremont for 35 years, retiring two years ago because of ill health. He was a member of the Episcopal Church, Delta Upsilon and Nu Sigma Nu. His widow survives.

Gomer E. Jones, M.D., Jackson; Miami Medical College, Cincinnati, 1896; aged 75; former member of the Ohio State Medical Association and the American Medical Association; died February 7. Dr. Jones retired five years ago, after having practiced in Oak Hill since 1900. His widow, a sister and two brothers survive.

Omie Joe Letherman, M.D., Thornville; Ohio Medical University, Columbus, 1903; aged 59; member of the Ohio State Medical Association and Fellow of the American Medical Association; died February 12. Dr. Letherman practiced in Thornville for 37 years. During the last World War he was a lieutenant in the Medical Corps of the U.S. Army. Dr. Letherman was a member of the Evangelical and Reformed Church, the Masonic Order, Modern Woodmen, Maccabees, American Legion and Veterans of Foreign Wars. His widow, a daughter and three sisters survive.

John Hummel Nichols, M.D., Mansfield; Rush Medical College, University of Chicago, 1896; aged 68; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; died February 10. A member of the staff of General Hospital, Dr. Nichols practiced in Mansfield for 44 years. He was a member of the Masonic Order and the Lutheran Church. His widow, a daughter and three sisters survive.

Joseph Harold Ralston, M.D., Cleveland; University of Wooster, Medical Department, Cleveland, 1913; aged 55; former member of the Ohio State Medical Association and the American Medical Association. Dr. Ralston had practiced in Cleveland for 27 years. He was a lieutenant in the Medical Corps of the U.S. Army in the last World War. Dr. Ralson was a Mason. Surviving are his widow and three sons.

Walter S. Scully, M.D., Columbus; Starling Medical College, Columbus, 1897; aged 69; died March 2. Dr. Scully retired in 1921 after having practiced in Groveport and Reynoldsburg for 24 years. His widow and a sister survive.

William Emory Stephens, M.D., Barnesville; Medical College of Ohio, Cincinnati, 1903; aged 66; former member of the Ohio State Medical Association and the American Medical Association; died February 13. Dr. Stephens practiced in Barnesville for 38 years. During the last World War he served in the Medical Corps of the U.S. Army. He was a member of the American Legion. His widow survives.

Wilbur Carl Tobey, M.D., Dayton; Eclectic Medical College, Cincinnati, 1904; aged 59; died February 22. Dr. Tobey practiced in Dayton for 35 years. His widow survives.

William Almon Werner, M.D., Niles; Western Reserve University School of Medicine, 1885; aged 85; died February 15. Health commissioner of Niles for 20 years, Dr. Werner practiced there for 40 years. He was formerly located in Youngstown and Austintown. Dr. Werner was a member of the Masonic Order, the Knights of Pythias and the Presbyterian Church. Surviving are his widow, a daughter and three sons.

Albert A. Wikoff, M.D., Portsmouth; Starling Medical College, Columbus, 1898; aged 72; member of the Ohio State Medical Association and the American Medical Association; died January 25. Dr. Wikoff practiced in Decatur for 19 years, and in January, 1917, located in Portsmouth. He was a member of the Methodist Church. His widow and two brothers survive.

Youngstown P-G Day, April 30

The Annual Postgraduate Day of the Mahoning County Medical Society will be held at the Hotel Ohio, Youngstown, Wednesday, April 30. The program will be given by the following distinguished members of the faculty of the University of Wisconsin Medical School: Dr. Wm. S. Middleton, Dean and professor of medicine; Dr. Elmer L. Sevringhaus, professor of medicine; Dr. Joseph W. Gale, associate professor of surgery; Dr. Ralph M. Waters, professor of anesthesia. Arrangements for the meeting are in charge of the Postgraduate Day Committee of the Society, of which Dr. W. J. Tims is chairman.

Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

CLINTON

Dr. William T. Scott, Martinsville, was honored Friday night, February 14, by members of the Clinton County Medical Society, and their families, at a dinner meeting at the General Denver Hotel, Wilmington, in recognition of his 52 years in the practice of medicine.—News clipping.

HAMILTON

The following programs were presented by the Academy of Medicine of Cincinnati during March:

March 4—Arranged by the Radiological Section. "The Placenta—A Roentgenologic Study", Dr. E. C. Elsey; "The Value of X-Ray Treatment in Sterility", Dr. Archie Fine; "Diverticula of Stomach", Dr. Harold G. Reineke; "Differential Diagnosis of Upper Abdominal Tumors", Dr. Samuel Brown; "Recent Advances in Radiology", Dr. Sidney Lange.

March 11—Hospital Night at Christ Hospital. Case reports by members of the staff. "Diagnostic Problem in Anemia", Dr. W. O. Ramey, Dr. Gordon H. Sprague; "Fever Therapy", Dr. M. F. Steele; "Pseudo Mucinous Adenoma of Liver with Ascites", Dr. Carroll J. Fairo; "Carcinoma of Upper Oesophagus, With Resection", Dr. Robert E. Howard and Dr. Nelson R. Cragg.

March 18—"Changing Concepts of Portal Cirrhosis", Dr. Albert Markley Snell, associate professor of medicine, University of Minnesota, Mayo Foundation, Rochester, Minn.

March 25—"Problems in the Use of Insulin in Diabetes Mellitus", Dr. Frank N. Allan, Lahey Clinic, Boston, Mass. This meeting was held under the auspices of the Council on Diabetes of the Public Health Federation of Cincinnati.—Bulletin.

HIGHLAND

The Woman's Auxiliary to the Highland County Medical Society met at the Highland House, Hillsboro, Wednesday, February 5. Following luncheon, the president, Mrs. W. M. Hoyt, Hillsboro, conducted a business meeting. Mrs. J. M. Byers, Greenfield, chairman of the Hygeia committee, presented "Hygeia". It is the wish of the Auxiliary that this magazine may enjoy an increasing sphere of usefulness, and that it may be placed in all public schools in the county.—Mrs. W. B. Roads, secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CHAMPAIGN

Dr. C. E. M. Finney, Springfield, spoke on "Arthritis", at a dinner meeting of the Champaign County Medical Society, Thursday evening, February 13, at the home of Dr. V. G. Wolfe, Urbana.—News clipping.

CLARK

"Aspects of Human Fertility", a sound motion picture, was shown at a meeting of the Clark County Medical Society, Thursday, February 13, at the Hotel Shawnee, Springfield.—News clipping.

Dr. C. Walker Munz spoke on "Treatment of Minimal Tuberculosis", at a luncheon meeting of the society, Thursday, February 27, at Springfield.—News clipping.

The following Springfield physicians have been elected officers of the society for 1941: Dr. Joseph H. Rinehart, president; Dr. C. W. Hullinger, vice-president; Dr. G. M. Lane, secretary; Dr. F. P. Anzinger, Sr., treasurer; Dr. R. R. Richison, legislative committeeman; Dr. R. M. Turner, medical economics committeeman; Dr. C. E. M. Finney, delegate; Dr. E. W. Keefer, alternate.—D. W. Hogue, M.D., Councilor.

DARKE

Dr. Gerald C. Grout, Dayton, spoke on "Allergy", at a meeting of the Darke County Medical Society, Tuesday, February 25, at the Cul-Mor Tea Room, Greenville. A sound motion picture film, "Studies in Human Fertility—Methods for the Control of Conception", was shown at a meeting of the society, Tuesday evening, March 18.—W. D. Bishop, M.D., secretary.

GREENE

An interesting and thought-inspiring lecture on "Significance of Fetal Environmental Differences", was given by Dr. L. W. Sontag, Fels Institute, Yellow Springs, at a meeting of the Greene County Medical Society, Thursday, March 6, at Xenia. Members of the society were urged to use their influence in behalf of the Enabling Act.—Donald F. Kyle, M.D., secretary.

MIAMI

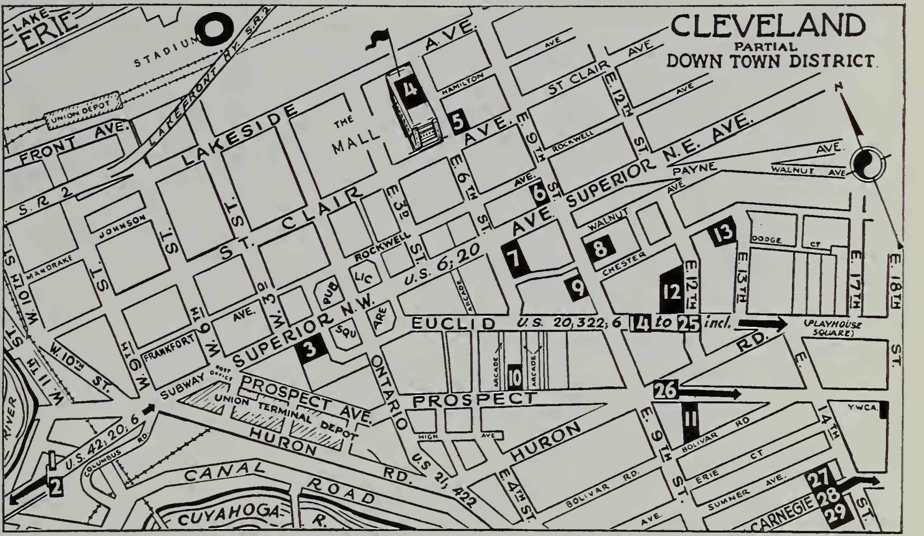
Dr. B. M. Hogle spoke on "The Diagnosis and Treatment of Gas Bacillus Infection", at a meeting of the Miami County Medical Society, Friday afternoon, March 7, at the Stouder Memorial Hospital, Troy. A motion picture film on "Studies in Human Fertility", was shown by the Ortho Products, Inc.—George A. Woodhouse, M.D., secretary.

A Woman's Auxiliary to the Miami County Medical Society was recently organized at a meeting in Piqua. The following officers were elected: Mrs. Charles Baker, West Milton, president; Mrs. William W. Trostel, Piqua, president-elect; Mrs. George A. Woodhouse, Pleasant Hill, vice-president; Mrs. E. R. Torrence, Troy, secre-

A.M.A. SESSION • CLEVELAND

JUNE 2-6, 1941

HOTEL RESERVATIONS



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SCHEDULE OF RATES (ALL RATES ARE FOR ROOMS WITH BATH)

Number on Map	HOTELS	SINGLES	DOUBLES	TWIN BEDS	SUITES
29	ALCAZAR, Surrey at Derbyshire Rd.	$3.00	$5.00	$5.00	$10.00-$15.00
13	ALLERTON, Chester at E. 13th St.	2.50- 3.00	4.25- 4.50		10.00
5	AUDITORIUM HOTEL, St. Clair at E. 6th St.	2.00- 4.00	4.00- 5.50	5.00- 7.00	
17	BELMONT, 3844 Euclid Ave.	1.75- 3.50	3.00- 5.00	4.00- 6.00	8.00- 10.00
27	BOLTON SQUARE, Carnegie at E. 89th St.	2.50- 3.00	3.50- 4.00	4.00- 5.00	8.00- 12.00
11	CARTER, Prospect at E. 9th St.	2.75- 5.00	4.00- 7.00	5.00- 9.00	12.00
3	CLEVELAND, Public Square	3.00- 6.00	4.50- 6.50	6.00- 10.00	21.00- 30.00
4	CLEVELAND PUBLIC AUDITORIUM, Lakeside & E. 6th St.				
10	COLONIAL, Prospect at E. 6th St.	2.50- 4.00	4.00- 6.00	5.00- 7.00	
20	DEVON HALL, 1588 Ansel Rd.	2.00- 3.00	3.00	3.00	
25	DOANBROOKE, 1924 E. 105th St.	2.50	4.00	4.50	
21	FENWAY HALL, Euclid at E. 107th St.	3.00- 5.00	4.50- 7.50	5.00- 10.00	6.50- 12.00
15	FERN HALL, 3250 Euclid Ave.	1.50- 2.50	2.50- 3.00	4.00- 5.00	
8	GILLSY, 1811 E. 9th St.	2.00- 4.00	3.00- 5.00	4.00- 8.00	
7	HOLLENDEN, Superior at E. 6th St.	3.00- 8.00	4.50- 10.00	5.00- 12.00	12.00- 16.00
1	LAKE SHORE, 12506 Edgewater Dr.	3.50	6.00	6.00- 8.00	8.00- 12.00
9	MILNER, 1862 E. 9th St.	1.50- 2.50	2.00	2.00	
14	NEW AMSTERDAM, Euclid at E. 22nd St.	2.00- 3.50	3.50- 4.50	4.50- 6.00	
6	OLMSTED, Superior at E. 9th St.	2.00- 4.00	3.50- 5.00	5.00- 6.00	20.00
22	PARK LANE VILLA, 10510 Park Lake	3.00	4.00- 5.00	6.00	10.00
17	QUAD HALL—(Men Only), 7500 Euclid Ave.	2.50		4.00	
19	ST. REGIS, Euclid at E. 82nd St.	2.00- 3.50	3.00- 4.50	3.50- 4.50	
23	SOVEREIGN, E. Blvd. & E. 105th St.	3.00- 4.00	5.00- 6.00	6.00- 7.00	10.00
12	STATLER, Euclid at E. 12th St.	3.00- 6.00	4.50- 8.00	5.00- 8.00	10.00- 23.00 (2-4 persons)
26	STERLING, Prospect at E. 30th St.	2.00- 3.50	3.00- 5.00	4.00- 6.00	8.00- 10.00
16	STOCKBRIDGE, 3328 Euclid Ave.	2.00	3.00	4.00	
28	TUDOR-ARMS, 10660 Carnegie Ave.	3.00- 6.00		6.00- 10.00	
24	WADE PARK MANOR, Park Lane at E. 107th St.	3.00- 4.00	7.00- 10.00	5.00- 6.00	10.00- 16.00
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MONTGOMERY

Dr. Hugo Roesler, Philadelphia, Pa., spoke on "Practical Aspects of Cardiology, such as Dizziness, Fainting, Venous Pulse and Treatment of Emergencies", at a meeting of the Montgomery County Medical Society, Friday, March 7, at Dayton.

"The Family in War Time", was the subject discussed by Dr. H. D. Piercy, Cleveland, at a meeting of the society, Friday evening, March 21.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

CRAWFORD

The regular monthly meeting of the Crawford County Medical Society was held in the new Galion City Hospital, Monday, March 3. The guest speaker, Dr. Louis J. Karnosh, Cleveland, discussed: "The Behavior of Human Beings After Removal of the Right Cerebral Hemisphere". Fifty members and guests from Richland, Marion and Morrow county societies attended the meeting and inspected the new hospital.—J. W. Arnold, M.D., secretary.

HARDIN

Dr. L. D. Miller, Toledo, spoke on "Urinary Infection", at a meeting of the Hardin County Medical Society, Thursday night, February 20, at Kenton.—News clipping.

LOGAN

"Sore Throat", was the subject discussed by Dr. O. C. Amstutz, at a meeting of the Logan County Medical Society, Friday evening, February 14, at the Hotel Logan, Bellefontaine.—News clipping.

SENECA

Seventeen members of the Seneca County Medical Society were present at a meeting of the society, Thursday evening, March 13, at the Fostoria City Hospital, at which Dr. Edward J. McCormick, Toledo, spoke on "Carcinoma of the Rectum and Colon".—N. E. Williard, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

HENRY

Dr. N. Worth Brown and Dr. Henry Teloh, Toledo, addressed the Henry County Medical Society, Tuesday, March 11, at Napoleon, on "Coronary Thrombosis" and "Electro-Heart Sounds". A very appreciative audience heard the addresses.—G. M. Wright, M.D., president.

LUCAS

Mrs. V. E. Holcomb, Huntington, W. Va., president of the Woman's Auxiliary to the American Medical Association, and Mrs. J. E. Purdy, Canton, president of the Woman's Auxiliary to the Ohio State Medical Association, were among the speakers at the organization meeting of the Woman's Auxiliary to the Academy of Medicine of Toledo, held at Toledo, Monday, February 3. The meeting was called by Mrs. A. A. Brindley, Toledo, director of the State Auxiliary. Officers of the Toledo auxiliary are: Mrs. Ralph P. Daniells, president; Mrs. Frank W. Morley, president-elect; Mrs. Glenn H. Reams, secretary; Mrs. Frank B. McNierney, treasurer.

Dr. Harry V. Paryzek, Cleveland, President-Elect of the Ohio State Medical Association, spoke on pending legislation affecting the medical profession, at a meeting of the auxiliary, Wednesday, February 12.—News clipping.

WOOD

"Head Injuries", was the subject discussed by Dr. Max Schnitker, Toledo, at a dinner meeting of the Wood County Medical Society, Thursday evening, February 20, at the Woman's Club, Bowling Green. After a broadly inclusive digest of recent developments in the physiology of the brain, particularly in relation to the fluid pressure balance, Dr. Schnitker discussed the procedures, based on these newer conceptions, which have been proven to be therapeutically effective in the treatment of injuries to the skull. These were codified by the speaker in such a way as to be easily grasped by the general practitioner, greatly aiding him in cooperating with the specialist. A number of lantern slide diagrams helped make the subject clear. The lively question period following the lecture attested to the interest of the members in the paper. A rising vote of thanks was tendered Dr. Schnitker.—D. R. Barr, M.D., correspondent for *The Journal.*

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

ASHTABULA

Dr. Theron S. Jackson, Cleveland, spoke on "Surgical Treatment of Stomach Disorders", at a meeting of the Ashtabula County Medical Society, Tuesday, March 11, at Hotel Ashtabula, Ashtabula.—News clipping.

CUYAHOGA

The following programs were presented by the Academy of Medicine of Cleveland during March:

March 7—Clinical and Pathological Section. "Appendicitis in Pregnancy", Dr. R. J. Smith; "Case of Bilateral Nephrostomy", Dr. J. A.

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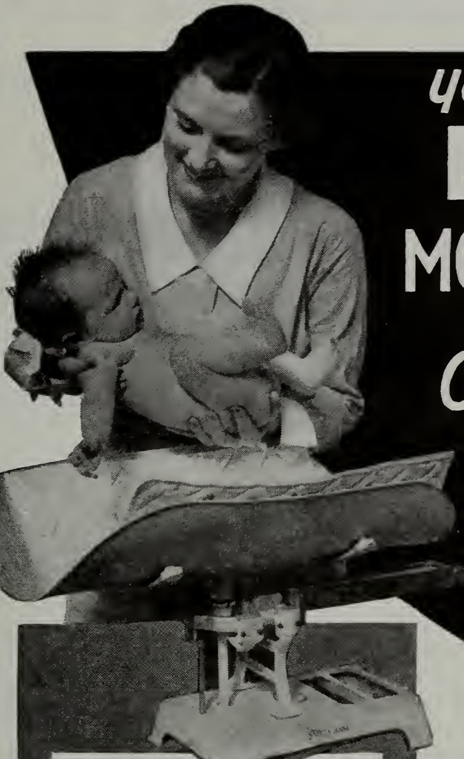

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March 14—Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "The Influence of Fats on the Motor Activity and Pressures of the Pyloric Sphincter Region and their Relation to Gastric Evacuation", Dr. I. Meschan, Dr. J. M. Wearle, M. Read, B.S., K.H. Radzow, B.S., and J. P. Quigley, Ph.D.; "Kymographic Studies of Human Intestinal Motility", Dr. P. M. Glenn; "Colon Motility Studies and their Clinical Applications", Dr. W. A. Reed and Dr. A. J. Beams; "Galactose Tolerance as a Measure of Impaired Intestinal Absorption", Dr. A. J. Beams, A. H. Free, Ph.D., and Dr. P. M. Glenn.—Bulletin.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

COLUMBIANA

Dr. Robert O. Garvin, Pittsburgh, spoke on "Some Common Diseases of the Colon", at a meeting the Columbiana County Medical Society, Tuesday evening, March 11, at the American Legion Hall, Lisbon.—News clipping.

MAHONING

Dr. Murray T. Copeland, Baltimore, Md., instructor in surgery, Johns Hopkins University School of Medicine and director of Tumor Clinic, Baltimore City Hospitals, spoke on "Practical Treatment of Tumors and Diseases of the Mammary Gland", Tuesday evening, March 18, at a meeting of the Mahoning County Medical Society at the Youngstown Club, Youngstown.—Bulletin.

Dr. O. J. Walker, Youngstown, member of the Committee on Public Relations and Economics of the Ohio State Medical Association, reviewed current legislative matters, including the Enabling Act, at a luncheon meeting of the Woman's Auxiliary, Monday, February 17, at the Y.W.C.A. parlors, Youngstown.—News clipping.

PORTAGE

At a meeting of the Portage County Medical Society, Thursday evening, March 6, at the Robinson Memorial Hospital, Ravenna, Dr. Max Miller of University Hospitals, Cleveland, spoke on "Water Balance".—Emily J. Widdecombe, M.D., secretary.

STARK

Scientific motion pictures produced by the Lederle Co., New York City, entitled "Post-Encephalitic Parkinsonism", and "Allergic Diseases", were shown at a meeting of the Stark County Medical Society, Tuesday evening, March 11, at the Canton Woman's Club.—Clair B. King, M.D., secretary.

SUMMIT

Dr. Roy W. Scott, professor of clinical medicine, Western Reserve University School of Medicine, Cleveland, spoke on "The Management of the Failing Heart", at a meeting of the Summit County Medical Society, Tuesday evening, March 4, at the Mayflower Hotel, Akron.—Bulletin.

TRUMBULL

Members of the Woman's Auxiliary to the Trumbull County Medical Society, attended a meeting, Tuesday afternoon, March 4, at the home of Mrs. W. G. Drown, Warren, at which Mrs. Edward Trescott reviewed James Hilton's book, "Random Harvest". Pamphlets urging passage of the Enabling Act were distributed.—News clipping.

Seventh District

(COUNCILOR: CARL GOEHRING, M.D., STEUBENVILLE)

TUSCARAWAS

Dr. Wm. M. Skipp, Youngstown, President of the Ohio State Medical Association, spoke on "Medical Legislation", at a joint meeting of the Tuscarawas County Medical Society and the Woman's Auxiliary, Thusday evening, February 13, at the home of Mrs. H. A. Coleman, New Philadelphia, president of the auxiliary. Dr. Burrell Russell, New Philadelphia, presented a resolution in memory of the late Dr. S. T. Marshall, Dover.—News clipping.

At a meeting of the society, Thursday evening, March 13, at New Philadelphia, Dr. R. R. Renner, Cleveland, spoke on "Surgical Diseases of the Stomach".—News clipping.

Officers of the society for 1941 include: Dr. R. E. Wolfe, Uhrichsville, president; Dr. W. W. H. Curtiss, Dennison, vice-president, and Dr. A. A. Greenlee, Dennison, secretary-treasurer.—A. Alvin Greenlee, M.D., secretary.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

GUERNSEY

A meeting of the Guernsey County Medical Society, Thursday noon, February 20, at the Berwick Hotel, Cambridge, was devoted to a discussion of poor relief. A motion was adopted approving an agreement with the county commissioners, to be effective until April 1, 1941, providing for the payment of bills for medical care of the indigent on the basis of 75 per cent of the county fee schedule, all bills to be subject to the approval of the Committee on Public Relations. This is the first real cooperation which

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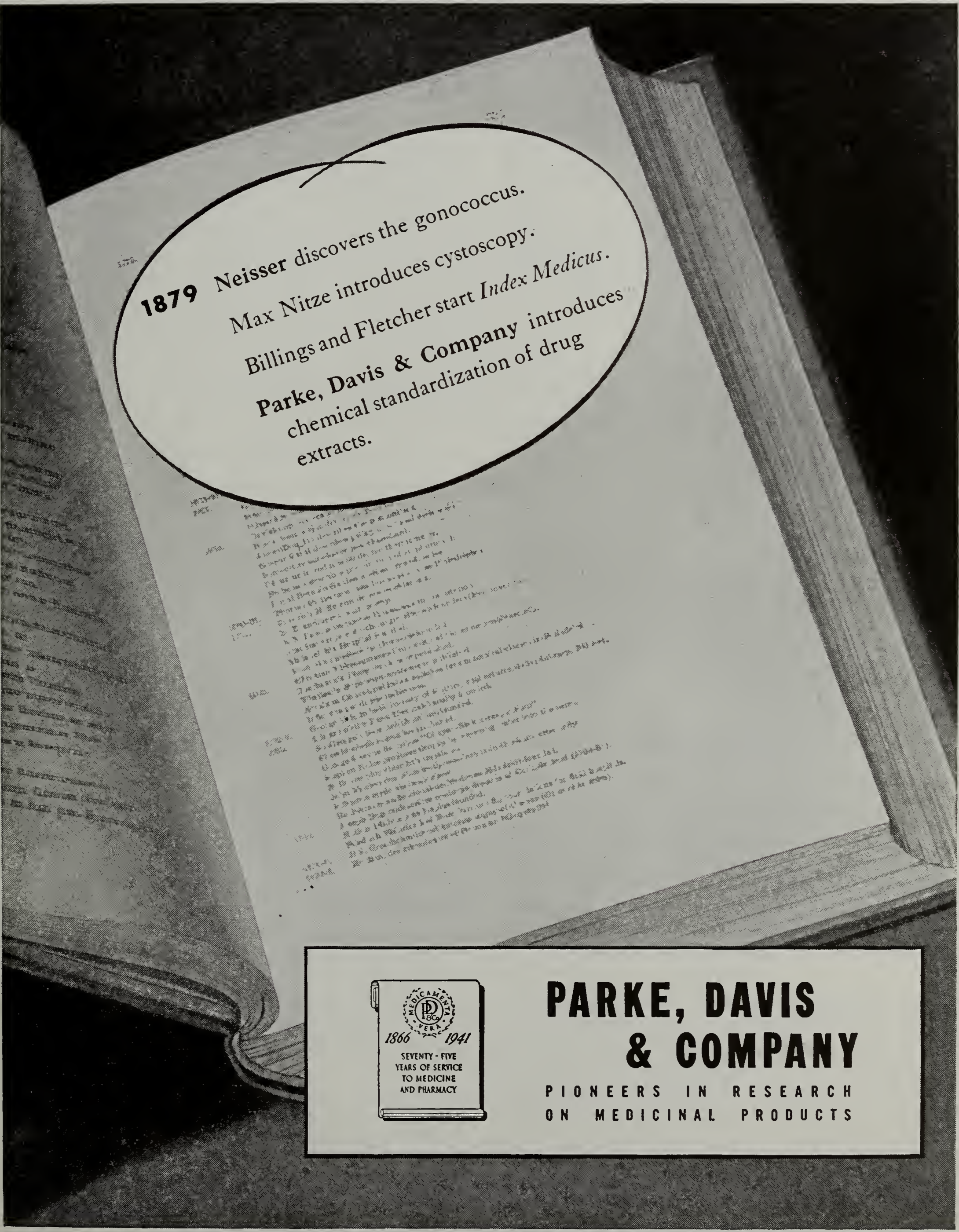

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the society has received from the commissioners. —M. J. Thomas, M.D., secretary.

LICKING

Dr. Harry E. LeFever, Columbus, spoke on "Low Back Pain Due to Spinal Cord Abnormalities", at a meeting of the Licking County Medical Society, Tuesday night, February 25, at Hull Place, Newark.—News clipping.

MUSKINGUM

"Hematemesis and Melena", was the subject discussed by Dr. Leon Schiff, assistant professor of medicine, University of Cincinnati College of Medicine, at a meeting of the Muskingum County Academy of Medicine, Wednesday noon, March 5, at the Zane Hotel, Zanesville.—Beatrice T. Hagen, M.D., secretary.

PERRY

Dr. Marion L. Ainsworth, Columbus, was guest speaker at a meeting of the Perry County Medical Society, Thursday, March 20, at the Park Hotel, New Lexington.—News clipping.

WASHINGTON

Papers were presented by Dr. G. E. Huston, Lowell, and Dr. Richard H. Sloan and Dr. R. M. Meredith, Marietta, at a dinner meeting of the Washington County Medical Society, Wednesday evening, February 12, at the Hotel Lafayette, Marietta.—News clipping.

Nineteen members were present at a meeting of the society, Wednesday evening, March 12, at the Wakefield Hotel, Marietta. Dr. Charles L. Goodhand, Parkersburg, W. Va., spoke on "Toxemias of Pregnancy". In discussing the subject, Dr. Welch England, Parkersburg, presented a resumé of the ophthalmoscopic findings in an eclampsism. Both of the speakers were instructive and entertaining.—Deane H. Northrup, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

JACKSON

Officers of the Jackson County Medical Society for 1941 are: Dr. Wm. B. Taylor, Jr., Jackson, president; Dr. Mel D. Smith, Wellston, secretary; Dr. Marlin R. Wedemeyer, Oak Hill, delegate; Dr. Wm. R. Riddell, Jackson, alternate.—G. A. Parry, M.D., retiring secretary.

SCIOTO

Dr. George I. Nelson, Columbus, associate professor of medicine, Ohio State University College of Medicine, spoke on "Treatment of Diabetes", at a meeting of the Hempstead Academy of Medicine, Monday evening, March 10, at the Portsmouth General Hospital.—Sol Asch, M.D., secretary.

A Woman's Auxiliary to the Academy is in the process of organization. Temporary officers are: Mrs. S. L. Meltzer, chairman; Mrs. Dow Allard, vice-chairman, and Mrs. Franklin Beeks, secretary.—News clipping.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

The Columbus Academy of Medicine presented the following programs during March:

March 3—"The Diagnosis and Care of Trauma to the Lungs", Dr. George M. Curtis.

March 17—Joint meeting with the Columbus Dietetic Association. "The Nutrition Problems of the Average Citizen", Martha Koehne, Ph.D., Nutritionist, State Department of Health.

March 24—Section in General Medicine. "Interesting Cases", Dr. H. H. Schwarzell and members of Mt. Carmel Hospital staff.—Bulletin.

Richard A. Aszling, director, Bureau of Public Education, Ohio State Medical Association, and John L. Hall, assistant director of the Columbus Council of Social Agencies, discussed "Community Health and Medical Care", at a luncheon meeting of the Woman's Auxiliary, Tuesday, February 25.—News clipping.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

ASHLAND

At a meeting of the Ashland County Medical Society, Friday night, February 21, at the Hotel Otter, Ashland, members of the society pledged their support to Dr. H. M. Gunn, chairman, and the other members of the legislative committee, in their efforts to influence legislators to vote for the Enabling Act. After considering business matters of local interest, the meeting ended with the presentation of a motion picture by the Ciba Company, which was well received by the members.

LORAIN

Dr. J. W. McCall, Cleveland, spoke on "Cancer of the Larynx", at a dinner meeting of the Lorain County Medical Society, Tuesday, March 11, at the Elks' Restaurant, Elyria.—L. H. Trufant, M.D., secretary.

RICHLAND

A panel discussion on "Colitis", was led by Dr. Willis E. Wygant and Dr. Carl R. Damron, at a meeting of the Richland County Medical Society, Thursday afternoon, March 20, at the Mansfield General Hospital.—George L. Evans, M.D., secretary.

WAYNE

Dr. Henry T. Stiles, Mansfield, spoke on "Use of X-ray in Infections", at a meeting of the Wayne County Medical Society, Friday evening, February 28, at Wooster.—News clipping.

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The Physician's Bookshelf

Death and Dentistry, by Martin H. Fischer, M.D. *(Charles C. Thomas, Springfield, Ill.)*, comes timely when we are reviewing and revising our views on the subject of focal infection. Our beloved member has attempted here to state in sequential form the principles of surgery that underlie the methods that he believes best in the eradication of infection in and about the teeth. The profession has reacted in both directions to this problem and now are coming to recognize its real importance. We have come through the days when it was recommended to every chronically ill person that he should have his teeth out to see what it might do for his disease. Now we must be able to recognize genuine dental infections. Professor Fischer has treated the patient as a unit. Every physician who attempts to treat the chronically ill should read it. Again, the combination of Martin Fischer and Charles C. Thomas gives us a book that is artistically designed and skillfully executed so that we can all take pride in its workmanship.

The Problem of Food, by Jennie I. Rowntree, Professor of Home Economics, University of Washington. Public Affairs Pamphlet 33 (revised) *(Public Affairs Committee, Inc., 30 Rockefeller Plaza, New York City)* teaches the individual how to get something like what he needs for his own good but at the expense always of someone else since we have all too little and that little is none too good.

The Otoscope as a Diagnostic Aid, a 32-page booklet on the otoscope as a diagnostic aid, and the ear in modern diagnosis, illustrated by a series of colored pictures of ear drums drawn from actual cases with the sole aid of the electric otoscope, has been published by *American Optical Company, Southbridge, Mass.* Copies can be obtained free of charge by writing the company direct.

Methods of Treatment, by Logan Clendenning, M.D. ($10.00. *Seventh edition, C. V. Mosby Company, St. Louis)* has been carefully revised and in many parts rewritten. This book furnishes in one volume of handy reference all the methods of treatment in internal medicine. One of the best of these is the chapter on the treatment of diseases due to allergy by Orvil R. Withers. Because of its conciseness and accuracy, it will easily pay its way on the desk of every active physician.

Foreign Bodies Left in the Abdomen; The Surgical Problems; The Legal Problems, by Harry S. Crossen, M.D., and David F. Crossen, LL.B. ($10.00. *C. V. Mosby Company, St. Louis)* is an attempt to emphasize to surgeons the dangers of the occurrence of this serious accident. By means of case histories, we are taught the prevention, treatment, responsibility, and court decisions. No surgeon should do himself the injustice of not having this book in his working library.

The 1940 Year Book of Industrial and Orthopedic Surgery, edited by Charles F. Painter, M.D. *(Year Book Publishers, Chicago)* is a new member of this helpful series. It has been assembled with the same high standards of editorship that has characterized the other volumes in this series. It will appeal to every orthopedist, industrial physician, general surgeon, pediatrician, radiologist and rheumatologist.

Rheumatic Fever. Studies of the Epidemiology, Manifestations, Diagnosis, and Treatment of the Disease During the First Three Decades, by May G. Wilson, M.D. ($4.50. *The Commonwealth Fund, 41 E. 57th St., New York City)* presents in one volume the results of more than 20 years' study on the subject on the part of the author. In presenting this experience she has used an evaluation of the literature as a background. A definite contribution to a subject of increasing importance to all physicians.

Office Urology With a Section on Cystoscopy, by P. S. Pelouze, M.D. ($10.00. *W. B. Saunders Company, Philadelphia)* is a personal monograph setting forth what this distinguished urologist does in his office. So personal is it that any physician although not interested especially in the subject can read it with pleasure for its sane philosophy of practice so suitable to any field of practice. To those who are interested in urology and the sex problem too few such presentations exist.

The Wonders of Life. How We are Born and How We Grow Up, by Milton I. Levine, M.D. and Jean H. Seligman ($1.75. *Simon and Schuster, New York)* tells the story of reproduction, for preadolescent and adolescent children in a clear, matter-of-fact manner. This is one of the books which should be left in a convenient place for children to find and read whenever their curiosity compels.

Clinical Pellagra, by Seale Harris, M.D. ($7.00. *C. V. Mosby Company, St. Louis, Mo.)* has as his collaborators Julien M. Ruffer, David T. Smith, V. P. W. Sydenstricker, Katherine Dodd, Wm. Porter, Upsher Higginbotham, Don C. Sutter, John Ashwith, and William D. Partlow. If you add to this the assistance of Seale Harris,

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph. Gon. & Ven. Dis., 23, 201 (March) 1939.

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Jr., and the foreword of E. V. McCollum, you have a book by the masters. An outstanding volume needed by all who are interested in pellagra, vitamin B complex, and deficiency diseases in general.

The Doctor and the Difficult Child, by William Moodie, M.D. ($1.50. *Commonwealth Fund, New York)* is an informal discussion of fundamental disturbances of behavior or personality in children and how they can be recognized, investigated, and treated. The author emphasizes that child guidance is a branch of clinical medicine. All physicians who are interested in this problem either as parents or practitioners should have the book.

The Doctor and His Patients. The American Domestic Scene as Viewed by the Family Doctor, by Arthur E. Hertzler, M.D. ($2.75. *Harpers, New York)* is another interesting volume from the pen of the author of "The Horse and Buggy Doctor." A delightful running comment on American home life by a nice old man who still has faith in the copy book axioms of his youth—and he may be right for it never pays to sneer at folk-lore. It is the wisdom of the ages and is therefore usually right.

For Daughters and Mothers, by Valeria H. Parker. M.D. ($1.50. *Bobbs-Merrell, Indianapolis)* is another guide for the different problems that beset a girl in her early teens, by the Director of the Bureau of Marriage Council and Education for Social and Family Relations. It lives up to its primary purpose which is to show a girl how she may solve her adolescent problems satisfactorily and prepare herself well for later life.

A Simplified Diabetic Manual, by Abraham Rudy, M.D. ($2.00. Second edition. *M. Barrow & Company, New York)* contains 163 international recipes—American, Jewish, French, German, and Italian. Considerable attention has been given to the possibility of vitamin deficiencies in diabetes in planning diets and a good deal to the prevention of the various complications. A thoroughly up to date and adequate book.

The Emperor's Itch, by Reuben Friedman, M.D., (*Froben Press, New York*; $1.50) deals with the legend concerning Napoleon's affliction with scabies. A most interesting study of the conquerer's suffering during his third and fourth decade of life.

Vitamins. What They Are and How They Can Benefit You, by Henry Borsook, professor of biochemistry ($2.00. *Viking Press, New York)* is an excellent presentation for laymen. Its greatest worth is that it teaches how to get all of these necessaries in our daily food without extra cost over the usual price paid for food. These instructions are also made applicable to those who eat in restaurants.

How to Raise a Healthy Baby, by L. J. Halperin, M.D. ($1.95. *Prentice- Hall, New York)* has been successfully contributed to give parents a source of information which may be used as a guide to understanding the problems which arise during infancy and early childhood. The subject is presented by interesting alternate questions and answers.

Medical Center, by Faith Baldwin ($2.00. *Farrar and Rinehart, New York)* tells the romances of those who live and work in a great hospital while their day's work requires that they stifle their emotions so much of the time and their escape mechanisms. Every one of us will enjoy this dissection of our prototypes.

A Pioneer Doctor of Old Japan, The Story of John C. Berry, M.D., by Katherine Fiske Berry ($2.50. *Fleming H. Revell Company, New York)* is the story of a "foreign devil" who entered Japan only 18 years after Commodore Perry. Overcoming the obstacles of hostility, ignorance, superstition and diseases, this New England physician at the end heard his praises sung by both Emperor and people. The story is well told and is both instructive and interesting.

Strange Malady, by Warren T. Vaughan, M.D. ($3.00. *Doubleday, Doran and Company, New York)* is the second volume in a series of science books for laymen sponsored by the American Association for the Advancement of Science. It is the story of the common forms of allergy. It is clearly written and interestingly illustrated with actual case histories. Well worth reading by every physician who wants to get a good view of this subject free of technical jargon and tiresomely strange words.

Better Nutrition For The Strength and Health Seeker, by Bob Hoffman ($2.00. *Strength and Health Publishing Company, York, Pa.)* is the ideas of one of the best "strong men" and editor of his own magazine. It is, however, a very excellent discussion of how to eat to be healthy and strong, told simply. It emphasizes a point very dear to your reviewer's heart—that this can be done at low cost. It is therefore a definite contribution to popular education of the most important single subject before our citizens.

The 1940 Year Book of General Medicine ($3.00. *Year Book Publishers, Inc., Chicago*) maintains the high standard of previous volumes. It continues to be one of the best books in our library to keep us up to date.

Broadway Stomach, by Joseph F. Montague, M.D. ($2.00. *Simon and Schuster, New York)* is

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another book by this popular author intended for victims of the high tension of modern living, telling them how to overcome indigestion and organize their brain, nerves and stomach into one smooth-working unit.

The Streptococci, Their Description, Classification and Distribution, with Special Reference to Those in Milk, by William D. Frost, and Mildred A. Engelbrecht ($4.25. *Willdof Book Co., Madison, Wisconsin)* represents many years of continuous study by Professor Frost and his associates at the University of Wisconsin. It deserves a place in the library of all who are interested in milk as a food.

I Remember, The Autobiography of Abraham Flexner ($4.75. *Simon and Schuster, New York)* tells the story of him who changed medical education in this country when in 1909 he produced his courageous report on medical schools. Time will tell us whether this was good or bad. Certainly it regimented American Medicine while it was improving it. Maybe this was for the best and maybe when it drove out the good clinician to make room on the faculty for the researcher it only conditioned us physicians for a government by Dictators. Anyway, you should read this biography of this man who changed American Medicine for the better or worse.

A Textbook of Clinical Pathology, edited by Roy R. Kracke, M.D., and Francis P. Parker, M.D. ($6.00. Second edition. *Williams and Wilkins, Baltimore)* maintains the high standard described in these pages. (August, 1938.) The emphasis continues on the clinical interpretation of the results of laboratory studies. The revisions have been so extensive as to require that the whole book had to be reset. There is an entirely new chapter on the assays of hormones and vitamins by our own Emmerich von Haam. An excellent text which will bring your laboratory up to date.

America Gives a Chance, by John J. Mullowney, M.D. ($3.00. *Tribune Press, Tampa, Florida)* tells the story of a Liverpool orphan who is sent out to Canada, goes to Harvard and the University of Pennsylvania Medical School; becomes a missionary in China; does public health work in Philadelphia; becomes a professor of chemistry and hygiene at Girard College; thence to Meharry in 1920 and finally to its presidency. Truly, America does give a chance!

A Family Doctor's Notebook, by I. J. Wolf, M.D. ($2.00. *Fortuny's, Publishers, Inc., New York)*. Dr. Wolf has presented a small group of subjects in an interesting and entertaining manner. It is loaded with facts that laymen and physicians alike think and wonder about. The education of a doctor in the old German Universities with the stern military discipline associated with an understanding which produced many famous scientists. The chapter on the use of drugs describes a bitter controversy between the homeopathic and the allopathic physician. Such a controversy no longer exists in modern medical training but it is a point which should be known if one is to appreciate the evolution of the use of drugs. The discussion of expensive instruments in the diagnosis of disease is not entirely without foundation.

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doctor and patient is a masterpiece. It should be read by every patient and every doctor. The entire book is well worth a critical reading by every physician and especially medical students. The layman, deeply interested in good medical care, and those attempting reforms, could well afford a few hours' deliberation over its pages.
—H.M.C.

Gross Anatomy, by Dwight M. Palmer, M.D. (Revised edition. *H. L. Hedrick, 254 East Oakland Ave., Columbus, Ohio)* is the dissection guide used in the Ohio State University. As this laboratory work is planned in this volume, much of the value of the good old days is salvaged. The student's interest is caught by pointing out the practical future application, much as the surgeon-teacher taught anatomy 75-100 years ago. There is an even more important principle evoked, i.e., the student always knows his assignment and where he is going by the sign posts in his dissection manual, and someone wiser and more experienced than he has marked "the points of interest" in his guide books. When taken together with X-ray plates and the student's own body, anatomy should be worth while —a thing it was not in my day.

Born That Way, by Earl R. Carlson, M.D. ($1.75. *The John Day Company, New York)* is the story of how he, severely injured at birth, and for years almost helpless, has managed by sheer will-power to make his way in the world and to become the authority and guide to those who are handicapped as he was. One of the characters whom we have always held in the highest esteem among modern medical men.

Diseases of the Digestive System by Eugene Rosenthal, M.D., of Budapest *(C. V. Mosby Company, St. Louis)* presents the subject in the manner of a great teacher—dogmatically, electrically, and with precision. About the best reading in the field which I have come across in a long time.

Influence of a Public Health Program on a Rural Community. Fifteen Years in Rutherford County, Tennessee, by E. Frank Walker and Caroline R. Randolph *(The Commonwealth Fund, New York City)* shows how vital a public health program is to a given community. Positive health for the individual citizens of a community depends upon a properly executed public health program, upon a high grade of professional curative service, and finally upon adequate nutrition. This booklet covers well the first phase.

Psychiatry for the Curious, by George H. Preston, M.D. ($1.50. *Farrar and Rinehart, New York)*, is the best presentation of the subject which has come to the attention of your reviewer.

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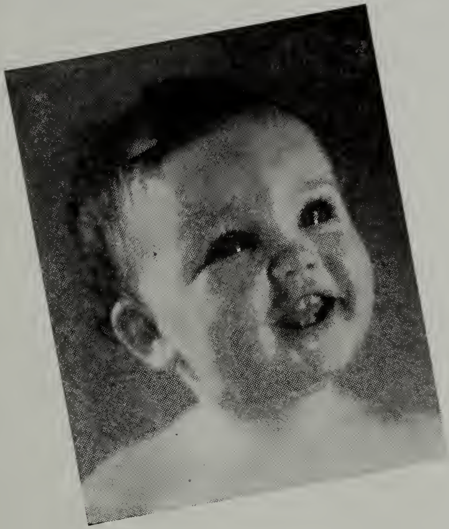

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Buckeye News Notes

Akron—Dr. Harold J. Gordon spoke on "Man and Woman Relationships", at a meeting of the health lecture forum of the Y.M.C.A.

Alliance—Dr. Bernard H. Nichols, Cleveland, spoke on "Uses of X-ray", at a meeting of the local Rotary Club.

Barnesville—Dr. William A. Knapp has been elected chairman of the Barnesville Boy Scout District.

Bridgeport—A community birthday party was held recently in honor of the 78th birthday of Dr. J. O. Howells, for 15 years president of the Board of Education and long active in many local civic and fraternal organizations.

Bucyrus—Dr. D. G. Arnold spoke on "You and Heredity", at a meeting of the White Foundation Circle of the Child Conservation League.

Canton—New staff officers of local hospitals include: Mercy Hospital—Dr. O. G. Wilson, president; Dr. Emerson Gillespie, vice-president; and Dr. Pauline Zinninger, secretary-treasurer. Aultman Hospital—Dr. C. E. Fraunfelter, president; Dr. Joseph F. Toot, vice-president; and Dr. Harold J. Bowman, secretary-treasurer.

Canton—Dr. John M. Van Dyke spoke on "Socialized Medicine", at a meeting of the Churchmen's Luncheon Club.

Canton—Dr. A. R. Basinger spoke on "Syphilis" at a recent meeting of the North Canton Woman's Club.

Cincinnati—Dr. J. L. Tuechter is the new president of the staff of Christ Hospital. Other officers are: Dr. H. M. Goodyear, vice-president, and Dr. P. W. Sutton, secretary.

Cincinnati—Dr. William M. German, pathologist at Good Samaritan Hospital, is on leave of absence for several months, during which time he will be an instructor at the University of Bogota, Colombia, South America. The appointment was made through the cultural relations department of the U.S. Department of State.

Cincinnati—Dr. Herman J. Nimmitz, former head of the Hamilton County Anti-Tuberculosis League, has been named superintendent of the Hamilton County Tuberculosis Hospital.

Cincinnati—New staff officers of Good Samaritan Hospital are: Dr. Donald J. Lyle, president; Dr. John J. Maloney, president-elect; Dr. Dale P. Osborn, secretary; Dr. Wesley L. Furste, treasurer.

Cleveland—Dr. Harry V. Paryzek, President-Elect of the Ohio State Medical Association, spoke on "The Enabling Act for Medical Service Plans", at a recent meeting of the Toledo Kiwanis Club.

Cleveland—Dr. George Murdock Saunders, nationally known student of leprosy and other tropical diseases, has been appointed lecturer in tropical medicine at Western Reserve University School of Medicine.

Cleveland—Dr. Harry Goldblatt discussed "Induced Hypertension", at a meeting of the Cleveland Society of Medical Technicians, February 20, at the Institute of Pathology.

Cleveland—"A Medical Man Looks at Mexico", was the subject of an address made by Dr. John E. Rauschkolb at a meeting of the Lakewood High School P.T.A.

Cleveland—Dr. Lawrence A. Pomeroy spoke on "Radium and Its Uses in Medicine", at a meet-

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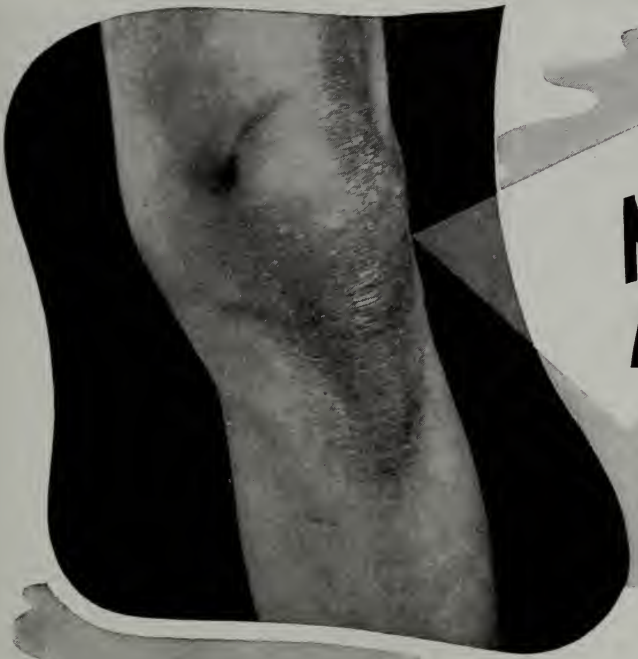
Frequently, the Headquarters Office receives inquiries from physicians seeking assistants, partners, or men qualified for positions on private hospital staffs.

If physicians seeking new opportunities or desiring to change locations will file their names with that office, an effort will be made to furnish them with suggestions and at the same time render a service to members seeking assistants, etc.



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The typical dermatitis of pellagra, characterized during its early stages by tenderness and erythema, and subsequently by thickening of the skin, and desquamation, not infrequently involves the lower extremities, especially the anterior aspects of the feet, ankles, legs, and knees.

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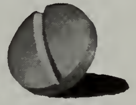

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Columbus—New officers of the Columbus Bureau of Medical Economics are: Dr. Lovell W. Rohr, president; Dr. W. M. Baker, dentist, vice-president; Dr. John H. Mitchell, secretary-treasurer. Stanley R. Mauck is executive director.

Columbus—Dr. J. H. J. Upham, Dean of Ohio State University College of Medicine, has been re-elected chairman of the Franklin County chapter of the National Foundation for Infantile Paralysis, Inc.

Columbus—Dr. P. B. Wiltberger, spoke on "Aviation Medicine", at a recent meeting of the Grove City Lions Club.

Columbus—A panel discussion on "Mental Hygiene" was led by Dr. Dorothy E. Donley at a meeting of the Woman's Medical Club.

Columbus—Among those who participated in a symposium on tuberculosis at a meeting of the 12th District Ohio State Nurses' Association were Dr. Myron D. Miller, superintendent of the Franklin County Tuberculosis Sanitarium; and Dr. Harold P. Klassen, examining physicians for the Columbus Tuberculosis Dispensary.

Columbus—Dr. William D. Inglis is chairman of the staff of White Cross Hospital, and Dr. R. E. S. Young is secretary-treasurer.

Columbus—New staff officers of Mt. Carmel Hospital are: Dr. J. Mitchell Dunn, chairman; Dr. William F. Drake, vice-chairman; and Dr. O. L. Coddington, secretary.

Columbus—Dr. Robin C. Obetz spoke on "Your Heart and Blood Pressure", at a meeting of the Chillicothe Lions Club.

Crestline—Dr. Carl A. Marquart has been elected president of the Board of Directors of the Crestline Emergency Hospital. Dr. E. C. Brandt is a member of the board.

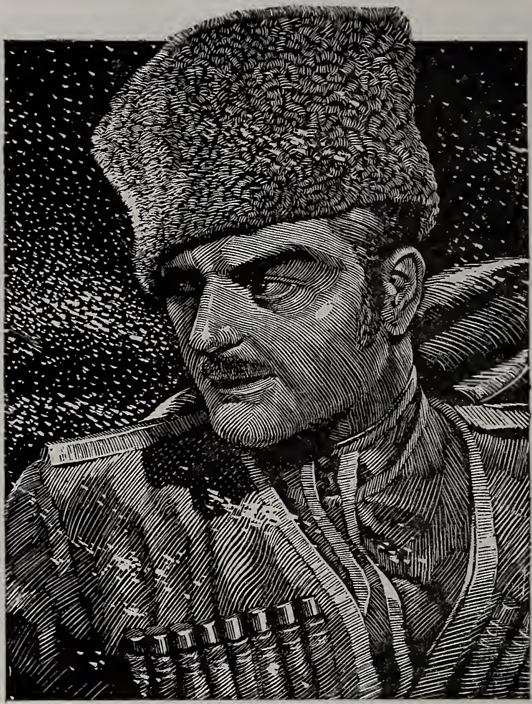
Dayton—Dr. Richard D. Bryant, Cincinnati, spoke on "The Use of Veratrim Viride in the Treatment of Eclampsia", at a recent meeting of the Dayton Obstetrical Society.

Dayton—New staff officers of Good Samaritan Hospital are: Dr. A. W. Carley, president; Dr. S. E. Kay, vice-president; Dr. R. J. Price, secretary. Members of the executive board are: Dr. R. L. Johnston, Dr. N. C. Hochwalt and Dr. Robert C. Austin, president of the staff last year.

Defiance—Surgical instruments of the late Dr. J. J. Reynolds, who practiced medicine for 61 years, have been donated by the family to the Bundles for Britain organization.

Fostoria—Dr. F. H. Pennell spoke on "The Advancement of Medical Science", at a meeting of the local Business and Professional Woman's Club.

Galion—The new Galion City Hospital, a 30-



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[1] Craig, C. F.: Amebiasis and Amebic Dysentery (1934).
[2] Zener, F. B., Am. Jl. Surg. 44:416 (1939).

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bed institution which cost $90,000, was opened recently.

Kent—Dr. A. O. DeWeese has been named president of the Portage County Public Health League.

Lakewood—Members of the staff of Lakewood Hospital gave a farewell dinner in honor of Dr. Stanley Gardner, who has reported for duty as a lieutenant-commander in the Medical Corps of the U. S. Navy at Great Lakes, Ill.

Lima—Dr. J. B. Poling has been reappointed city health commissioner for a five-year term.

Litchfield—Dr. Harry Streett has been re-elected president of the Lodi Hospital Company.

Niles—Dr. S. W. Boesel has been appointed city health commissioner, succeeding the late Dr. W. A. Werner.

Pandora—Dr. Harry A. Neiswander spoke on "Problems in Connection with the Draft", at a meeting of the Ottawa Kiwanis Club.

Portsmouth—Dr. C. G. Braunlin is the first president of the newly organized Portsmouth Board of Trade.

Springfield—Royal E. Raper, Peoria, Ill., has been appointed superintendent of City Hospital, succeeding Van C. Adams, who resigned to accept the superintendency of Jewish Hospital, Cincinnati.

Steubenville—Dr. George W. Bassow, Woodstock, N. Y., is the new health commissioner of Jefferson County.

Toledo—Dr. E. J. McCormick has been re-elected chief of staff at St. Vincent's Hospital. Other officers are: Dr. Martin W. Diethelm, assistant chief, and Dr. A. Paul Hancuff, secretary.

Toledo—Dr. W. W. Brand, honorary president of the Ohio Obstetric Society, was recently honored by members of the society at a dinner in the Toledo Club.

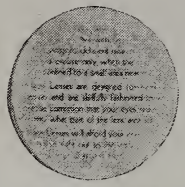
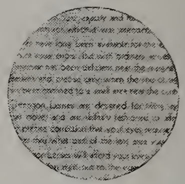
Toledo—Dr. Joseph R. Kriz, associate director of the City of Kingston Laboratories, Kingston, N. Y., has been appointed pathologist of the Lucas County Hospital.

Toledo—Dr. E. J. McCormick spoke on "The Humorous Side of Medicine" at a meeting of the Lions Club, at which Dr. Barney J. Hein was chairman.

Van Wert—An address on the history of X-ray and radium was made by Dr. B. L. Good at a meeting of the Kiwanis Club.

Waynesville—Dr. Mary L. Cook, who sustained a fractured leg and other injuries in an automobile accident several weeks ago, is now convalescing at her home.

Youngstown—Dr. Wm. M. Skipp, President of the Ohio State Medical Association, was guest speaker at a recent meeting of the Girard Kiwanis Club.

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* Espe & Dye — "Effect of Curd Tension on the Digestibility of milk" — Amer. Journal Diseases of Children — 1932, Vol. 43, p. 62.

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Ohio Physicians Will Participate In College of Physicians Meeting

The Twenty-Fifth Annual Session of the American College of Physicians will be held at Boston, Mass., April 21-25, with headquarters at the Hotel Statler. A number of Ohio physicians are scheduled to participate in the program. As part of the symposium on infectious diseases, Dr. John A. Toomey, Cleveland, will speak on "Scarlet Fever Immunization" and Dr. Walter M. Simpson, Dayton, on "The Diagnosis and Management of Brucellosis". "Peripheral Circulation Failure Mechanism", is the subject of a lecture to be given by Dr. Carl J. Wiggers, Cleveland. Among those who are to take part in a panel discussion on "Disorders of the Blood", are Dr. Charles A. Doan, Columbus, and Dr. Russell L. Haden, Cleveland. Dr. Tom D. Spies, Cincinnati, is one of the speakers in a panel discussion on "Nutritional Deficiencies". Dr. Wiggers will also take part in a panel discussion on "Physiological Aspects of Heart Disease". "Coronary Disease in Diabetes", is to be discussed by Dr. Thomas P. Sharkey, Dayton, at one of the clinics. The very comprehensive program is expected to attract several thousand physicians to Boston.

Essay Award Announced

The Mississippi Valley Medical Society offers annually a cash prize of $100, a gold medal and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics) of practical value to the general practitioner of medicine. Contestants must be members of the American Medical Association who are residents of the United States. All contributions must not exceed 5,000 words and must be submitted not later than May 1. Complete details concerning the contest may be secured from Dr. Harold Swanberg, secretary, Mississippi Valley Medical Society, Quincy, Ill.

Complete Public Speaking Course

The Public Speaking Course sponsored by the Cleveland Academy of Medicine for its members recently closed after a very successful ten-weeks course under the able direction of Professor Karl Thompson of the English Department of Case School of Applied Science. Average attendance at the classes was 15.

Those who took part were as follows: Drs. E. H. Adler, L. Rubini, B. B. Sankey, J. K. Potter, R. J. Whitacre, W. Thiessen, J. W. Thomas, J. F. Renshaw, J. Schwartzberg, D. K. Spitler, Julien M. Goodman, Sarah Marcus, Victor Tanno, George H. Irvin, Walter Zeiter, B. R. Krupkin.

Dr. Victor C. Laughlin acted as chairman and Dr. D. H. Patterson was secretary of the group.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 May, 1941 No. 5

JONATHAN FORMAN, M.D., *Editor*

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Clinical Aspects of Ovarian Deficiencies

BESSIE G. WIESSTIEN, M. D.

SOME of the more recent advances in clinical endocrinology have resulted from (1) a better understanding of the interrelationships among the several glands, (2) the discovery in and extraction from the blood and urine of estrogens and gonadotropic hormones (pituitary and chorionic), and (3) interpretation of the effects of ovarian hormones upon the cytology of the genital tract.

HORMONAL INTERRELATIONSHIPS OF NORMAL MENSTRUAL CYCLE

Menstruation implies regularly recurring bleeding from a premenstrual or secretory endometrium and is to be differentiated from bleeding from a pre-ovulatory or proliferative endometrium without evidence of a progesterone effect. Bleeding from a premenstrual endometrium indicates that ovulation has taken place, a corpus luteum has formed and that fertilization and nidation are possible. Bleeding from a proliferative endometrium, on the other hand, indicates failure of ovulation and corpus luteum formation and consequently infertility.

The hormones directly involved in menstruation are those of the ovary and the gonadotropes of the anterior pituitary. The thyroid, adrenals, and possibly other glands are also involved in menstruation. Imbalance among these glands leads to menstrual disturbances. The autonomic nervous system, through its influence on ovarian activity, also is a factor in regulation of the menstrual cycle.

Briefly, the hormones essential for the production of the menstrual cycle are the follicle-stimulating and luteinizing hormones from the anterior pituitary, and the follicular and corpus luteum hormones from the ovary. In response to the follicle-stimulating hormone there results the formation of the Graafian follicle which secretes the follicular hormone; the luteinizing hormone converts the ruptured follicle into a corpus luteum which secretes progesterone. Normally there is a delicate balance among the anterior pituitary and ovarian hormones which is lost when there is a change in the amount of any one of them. Follicular or estrogenic hormone is secreted throughout the cycle; during the first half of the cycle it is produced by the follicle and in the second half by the corpus luteum. If the follicle-stimulating hormone is inadequate in amount or if its period of activity is shortened, the follicle does not develop completely. An immature follicle is incapable of normal luteinization as is observed in juvenile or pubertal bleeding.

The Author

● Dr. Wiesstien, Cleveland, Ohio, is a graduate of Woman's Medical College, of Pennsylvania; clinician, out-patient department gynecology and obstetrics, Endocrine Clinic, Mt. Sinai Hospital, Cleveland.

VALUE OF BIOLOGICAL ASSAYS

A careful history frequently suggests the nature of the ovarian deficiency. The history should include in detail the onset and character of the present complaint, as well as the entire menstrual history from menarche, including pertinent facts as to growth, dietary habits, idiosyn-

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Read before the Medical Staff of Woman's Hospital, Cleveland.

crasies, infections, etc. In addition to the gynecologic examination complete physical examination and laboratory studies such as endocrinologic assays, vaginal smears and endometrial biopsies are of great diagnostic value. Frank, Goldberger, Kurzrok,[1] and others have reported systematic assays of follicular hormone in the urine and blood during normal 28- to 30-day menstrual cycles. These assays have contributed much to the knowledge of ovarian activity. Seibke reported 10 to 30 m.u. in a day's output of urine for the first 10 days of the cycle and 60 to 180 m.u. in the next 10 to 12 days. The peak of excretion lies between the 15th and 20th days of the cycle. After the 20th day to the onset of menstruation there is a rapid drop in follicular hormone excretion, the lowest values being found shortly before or during menstruation. Total excretion lies between 1,000 and 2,000 m.u. Slightly different excretion curves are reported by other investigators. Frank reports the peak of excretion to correlate with ovulation and to persist for several days. The average level is then resumed with a rapid drop in the amount a few days preceding menstruation. The total amount excreted averages 1500 I.U., which corresponds to Siebke's figures. There is a rough parallelism between the curves of blood folliculin and urine excretion of follicular hormone, except that blood folliculin concentration is low until the week preceding menstruation when it attains its highest point just before menstrual flow and then rapidly falls.

Assays of blood and urine for gonadotropic hormones are too costly for routine use. In experimental work, however, these assays are indicative of the pituitary activity and are of value in amenorrhea, menopause, and chorionepithelioma. Twelve to 18 R.U. of prolan may be recovered from the urine about the time of ovulation, the 10th to 11th day. Progesterone, the corpus luteum hormone, has not been recovered in the urine, as such. Venning and Brown[2] have shown the excretion product of corpus luteum hormone to be sodium, pregnanediol glycuronidate. This compound is absent from the urine during the follicular phase, appearing first 24 to 36 hours after ovulation. It usually persists for 10 to 12 days and totals 45 to 55 mg. per cycle. Ordinarily the excretion stops one to three days before the onset of menstruation. Henry, Venning and Brown[3] have shown the practical value of pregnanediol excretion tests in 35 cases of threatened and habitual abortion. Henry[4] found the 81st day from the beginning of the last menstrual cycle to be the critical period in 500 cases of threatened, complete, and incomplete abortion.

CYCLIC GENITAL CHANGES

Papanicolaou and Stockard of Cornell in 1917 demonstrated through special staining a rythmic sequence of typical cellular changes in the vaginal fluids of the guinea pig. Later Papanicolaou[5] correlated morphological and cytological changes in human vaginal secretions with ovarian function. Papanicolaou and Shorr[6] show the value of vaginal smear studies in treating menopausal patients with estrogenic preparations. On account of the objectivity of this criterion the vaginal smear is of special assistance in therapy of psychotic patients and in others presenting unusual subjective symptoms. The vaginal smear picture is defined most clearly in the surgical or irradiation castrate.

The cyclic changes in the endometrium, as shown by endometrial biopsy studies, follow a regular and progressive pattern in the normal menstruating woman from puberty to menopause and "may be taken as criteria of ovarian function or dysfunction; any observed stage of endometrial development may, therefore, be taken as reflecting the activity of the ovaries at the time taken and must be interpreted in relation to the approximation of or deviation from expected pattern normally corresponding to the developmental time in the cycle".[7]

The proliferative phase in the endometrium during the first half of the menstrual cycle is influenced by estrogens or follicular hormones from the ovary while the secretory phase during the second half of the cycle is influenced by progesterone from the corpus luteum. Any imbalance in pituitary-ovarian, pituitary-adrenal-ovarian, or utero-ovarian relationships results in altered endometrial pictures. The functions of the liver in destruction of hormones and of the kidney in their excretion, are of increasing interest in endocrine studies.

CLINICAL CONSIDERATIONS

1. AMENORRHEA

Knowledge of the foregoing endocrinologic fundamentals is essential to proper diagnosis and therapy. Choice of preparation and determination of dosage are based upon these principles gained from experimental work. Kaufmann, Loeser, and Clauberg have shown that at least 2,000 R.U. of estrogenic substance daily are required for development of a functional state in an atrophic uterus. Kaufmann further demonstrated that in castrate women it requires 40,000 to 50,000 R.U. to change an atrophic endometrium to the proliferative type and when followed with seven daily injections of progesterone, 5 rabbit units, converts the endometrium into the secretory type, resulting in menstruation. These dosages have been substantially corroborated by many other investigators.

Some of the more common conditions ascribed to ovarian deficiency are amenorrhea, hypomenorrhea, oligomenorrhea, and menopause. The etiologic factor in ovarian deficiency may be any condition affecting the general health, such as infectious diseases, parotitis, avitaminosis, blood dyscrasias, mitral stenosis, aortic insufficiency, diabetes, tuberculosis, shock, fright, a change of climate or environment, and undernutrition.

Primary endocrine disturbances exist in the majority of ovarian deficiencies. Such glandular causes may be attributable to the pituitary, the thyroid, the adrenals, or directly to the ovaries. Among the pituitary conditions leading to ovarian deficiency may be mentioned (1) Froehlich's syndrome with its girdle and suprapubic obesity, hypertrichosis, and genital dystrophy and hypoplasia; (2) Simmonds' disease, less frequently seen, with its extreme emaciation, cachexia, asthenia, low metabolism, and which is not to be confused with anorexia nervosa.

Ovarian deficiency may be seen in hyper- or in hypo-thyroidism.

Among the adrenal causes of ovarian deficiency are (1) the adrenogenital syndrome (virilism), hyperplasia of the cortex and cortical tumors with hypertrichosis, enlarged clitoris, and uterine atrophy; (2) Addison's disease with its concomitant hypoplasia or atrophy of the ovary. Precocious puberty is sometimes due to adrenal tumor. In the ovary itself the cause of deficiency may be an incomplete development of the follicle, failure of formation of new follicles, or occasionally a persistent corpus luteum.

The uterus itself may hold the etiologic factor. Hypoplasia of congenital origin in the Müllerian duct system may manifest itself in a small uterus, in a change in the ratio 2:1 between the size of the cervix and the body, a persistent infantile type, or a type of uterus which fails to respond to normal hormone stimulation but does respond to excessive stimulation by uterine growth and bleeding (Kurzrok,[1] Fluhmann[8]). The more nearly normal uterus offers the better prognosis even though the endometrium is atrophic.

TREATMENT

The first step in treatment is to correct constitutional factors. If obesity exists and if basal metabolic rate permits, a reduction diet with thyroid medication is prescribed. If the patient is undernourished a wholesome diet with ample vitamins, cod liver oil, outdoor exercises, etc., is instituted. Occasionally nothing is required beyond these simple hygienic measures, but usually endocrine therapy is indicated. Choice of product and dosage depend upon the size and proportions of the uterus and upon the type of endometrium.

Endocrine therapy may be (1) substitution with estrogens and progestin, (2) gonad-stimulating with anterior pituitary extracts, pregnancy urine gonadotropins (Antuitrin S, APL, Pranturon), or pregnant mare serum gonadotropin (Anteron, Gonadogen, Gonadin), (3) combination therapy. Irradiation (85 Roentgen units, Mazer) of the pituitary and ovaries at three weekly intervals is another therapeutic method in use.

In amenorrhea of short duration Zondek[9] reports satisfactory results with small doses of estrin, 2,000 to 4,000 I.U. daily. If the endometrium is atrophic and the uterus is of normal size larger doses should be used, 10,000 R.U. two or three times weekly for five doses, followed by a rest period of two weeks and repetition of the course whether or not bleeding ensues.[10] If the uterus is hypoplastic, we have used estrin first and then followed with gonadotropic substance, or we have started with anterior pituitary extract 2 cc. in combination with APL 1 cc. administered every other day for two weeks. After a two weeks' interval this course is repeated. Pregnant mare serum, since presumably it contains both follicle-stimulating and luteinizing hormones, should be effective. At present this is being used in a series in which endometrial biopsies and smears are made, with encouraging results. Every attempt should be made to imitate nature in her cycles.

CASE REPORTS

CASE I. H. L., age 19.

11-16-39: Referred because of amenorrhea for ten months. Previous periods always regular 28-day cycle, 4 days, moderate flow, no pain. Past history negative. Had recently lost 15 pounds through self-prescribed diet. Well developed, 115 pounds, 5' 2". Pulse and temperature normal. Basal metabolic rate—26 per cent. Last menstrual period February, 1939. Physical examination negative except for retroplaced uterus of normal size. Permission for biopsy obtained. One grain thyroid prescribed daily.

11-27-39: PMS 200 units.

12- 1-39: PMS 200 units.

12- 4-39: PMS 200 units.

12- 6-39: PMS 200 units, tissue insufficient for biopsy.

12- 8-39: PMS 200 units.

12-12-39: PMS 200 units, endometrium very thin.

12-22-39: Endometrium thinner than average, atrophic changes, slight secretion.

12-22-39 to 1-4-40: No medication or examinations.

1- 4-40: PMS 200 units.

1- 6-40: PMS 200 units, estrin assay less than 5 R.U.

1-10-40: PMS 400 units, vaginal smear showed poor follicular effect.

1-13-40: Clear thick cervical mercus: estrin assay 5 R.U.

1-17-40: Progynon-B 2,000 R.U., occasional mitotic figures, early secretory phase.

1-20-40: Progynon-B 2,000 R.U., estrin assay less than 5 R.U.

1-24-40: Progynon-B 2,000 R.U.

1-27-40: Progynon-B 10,000 R.U., vaginal smear post-ovulatory, few pus cells. Estrin assay 10 R.U.

2- 4-40: Progynon-B 10,000 R.U.

2- 6-40: Progynon-B 10,000 R.U.

2- 8-40: Progynon-B 10,000 R.U.

2-10 to 14-40: Menstruation free from pain.

3- 4 to 5-40: Menstrual stains.

3-30-40 to 4-3-40: Usual premenstrual molimina. Menses—5 days.

4-27-40: Normal menstruation, no pain.

Patient now under observation to determine whether normal balance has been re-established. Premenstrual biopsies were suggested as index of type of endometrium.*

CASE II. L. F., age 20.

First seen September 13, 1938, soon after entering nurses' training school. History of amenorrhea covering 31 months with only slight bleeding in August, 1937, and November, 1938. One day's staining on January 10 and 25, 1939. Basal metabolism + 9 per cent. Menarche at 15, always previously regular four- to five-day type without pain. Thorough study had previously not disclosed cause of amenorrhea. The four menstrual periods mentioned followed injections of pituitary extract and luteinizing gonadotropic hormone. There was no secretory endometrium at time of these bleedings. Four weekly biopsies showed only proliferative endometrium. The course was repeated four times with similar results. Three doses of PMS 200 units were preceded and followed by 2,000 R.U. Progynon-B. After an interval of six weeks Emmenin, 1 drachm twice a day, was given for three weeks. The pituitary and ovaries were irradiated on September 19 and 26th, and on October 3d. On October 30th a biopsy yielded insufficient tissue. There was no menstrual molimina and the vaginal smear was negative. On November 9th PMS was continued, 200 units every other day for six doses. On November 20th endometrial biopsy showed moderately advanced secretory endometrium. Two days later the patient had a normal menstrual period. November 30, December 1 and 2d PMS 200 units. Three weeks later she menstruated and since has had six consecutive periods. No further therapy.*

This case represents some of the difficulties met in trying to re-establish normal ovarian function. This and Case I illustrate the effectiveness of combined therapy.

COMMENT

In this connection the subject of fertility is of interest. There is greater chance for pregnancy in regularly menstruating women than in those with delayed or long-spaced menstrual flows. Low fertility may be caused by deficient oögenesis, by defective endometrium resulting from inability to utilize available hormones, or by defective corpus luteum with deficiency of progesterone production. Infertility may be due to failure of the ovum to leave its follicle (anovulatory cycle), or if it does leave it may not find its way into or through the Fallopian tube (Campbell[11]); and lastly, but of greatly increasing importance, to failure of the fertilized ovum to imbed itself satisfactorily and securely because of a poor secretory endometrium.

2. POLY-HYPERMENORRHEA

The next clinical syndrome of ovarian deficiencies to be discussed are too frequent bleedings (polymenorrhea) and excessive bleedings (menorrhagia). Pelvic inflammatory disease, tumors, and other constitutional causes such as blood dyscrasias, leukemias, etc., will not be considered here although these are met with in apparently normal women. In the young girl or adolescent profuse and frequent bleedings may be very distressing and difficult to control. They may be caused by multiple follicle stimulation without maturation or ovulation. In the mature active woman these bleedings may be due to Graafian follicle cysts with increased estrin production or corpus luteum deficiency. Polymenorrhea results from an interference in the post-ovulatory phase (deficiency or absence of progesterone), while oligomenorrhea results from a disturbance in the preovulatory phase.

Treatment is directed to the underlying causes; biopsy studies are of value in determining therapy. If only one biopsy is permitted it is best taken in the first few hours of bleeding. Basal metabolic rate studies are of value as thyroid hypofunction is a common finding and frequently thyroid is the only medication necessary. Usually 1 or 2 grains a day will bring basal metabolic rate to normal. Iron and liver preparations are prescribed for the anemia and ergot may be used to stimulate uterine contractions. Luteinizing hormones, chorionic gonadotropic hormone, 200 to 250 R.U. daily or three times weekly are useful. Moccasin venom 0.5 cc. increased to 1 cc. of 1:3000 solution injected subcutaneously for ten days is occasionally of value. X-ray irradiation when judiciously used may give results after every other available means has failed. Curettage is indicated in cases of hyperplastic endometrium. Two or three weeks after curettage progesterone 5 mg. every second day for five days or APL 250 R.U. three times weekly may be used.

CASE III. M. G., age 18.

History of profuse bleeding for three weeks. Seen first in O.P.D. and was given APL 500 R.U. and sent to hospital on account of history of fainting and severe secondary anemia. Was given blood transfusion and then curettage. Discharged in a few days and reported to endocrine clinic.

1-17-38: Biopsy was of Swiss cheese pattern.

2- 9-38: Estrin assay 10 R.U. APL 250 R.U. twice weekly.

2-15-38: Menstruation for four days.

2-16-38: Estrin assay 5 R.U. APL 100 R.U. twice weekly.

3- 5-38: Estrin assay 5 R.U. APL 100 R.U. twice weekly in latter half of cycle.

3-12-38: Estrin assay 10 R.U.

3-16-38: Biopsy showed early premenstrual phase, post-ovulatory.

3-20-38: Menstruation for 5 days.

4- 9-38: Biopsy showed premenstrual endometrium. Patient's visits became irregular and finally she reported feeling excellent and felt no need to return. Three months later there was a polypoid endometrium showing excessive estrin effect and a real or relative underproduction of progesterone (slight secretory appearance).

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* Both patients report regular periods Dec., 1940.

3. DISEASES OF THE CLIMATERIC

The majority of cases seen in the endocrine clinic are the ovarian deficiencies associated with natural or artificial menopausal syndrome. The climacteric is not a disease but a "functional disturbance of the hormonal and nervous equilibrium" resulting from the withdrawal of estrogenic hormone and the consequent excessive pituitary activity. The widely varying symptoms do not always correspond to the vaginal smear findings. The symptoms may occur before the menses cease and continue long after. Surgical and irradiation castration usually produce more severe symptoms than the natural menopause. Forty to fifty per cent of ovaries atrophy or develop cystic changes following hysterectomy. Absence of the uterus brings about early decline of ovarian activity, probably due to lack of hormonal secretion by the uterine endometrium. Zondek[9] describes the changes noted in the climacteric as "poly-hormonal" stages: (1) poly-folliculin, (2) oligo-folliculin, (3) poly-prolan phase. During the first stage the uterus may be larger than normal. Uterine hemorrhages may occur due to the increased number of functioning follicles, 10 to 20, with a corresponding progesterone deficiency. Then the follicle activity decreases and the well-known vasomotor symptoms appear. This is accompanied and followed by an increased activity of the anterior pituitary with hyperfunction in an attempt to compensate for the failing ovary. This gives rise to the common endometrial picture of hyperplasia and progesterone deficiency, with increase in blood and urinary prolan. In 1936 Albright drew attention to the overproduction of gonadotropic substance and the occurrence of flushes. This was corroborated by Frank and others.

The symptoms of the menopause in order of their frequency are: flushes, sweats, menstrual irregularities, insomnia, headache, nervousness, irritability, fatigability, tenseness, emotional instability, diminished mental efficiency, paresthesia of the hands and body, vascular disturbances as palpitation, heart consciousness, gastrointestinal symptoms, arthritis, peripheral skin disorders, pruritus vulvae, etc.

Vaginal smears are of great value to the clinican in menopausal therapy. Starting with a negative smear, with numerous deep cells, large nuclei, pus cells, occasional erythrocytes, bacteria and fibrin—the entire picture is that of a dirty or smudgy appearance. With estrogenic therapy this changes to a clearer slide, epithelial cells are grouped and larger with moderate sized nuclei, pus cells disappear. Finally the deep cells disappear, the epithelial cells are larger, flat, and some are cornified, with small pyknotic nuclei. There is absence of pus cells and the picture on the whole is clean.

Dosage requirement varies with each individual. Clinical improvement is often noted in advance of any change in the vaginal smear. Small doses are frequently satisfactory. In this clinic 10,000 I.U. twice a week is the usual starting dosage. This is continued until relief is obtained. Smaller doses and sometimes larger doses are required. After relief is obtained the dosage may be reduced and the patient may be treated orally for a month or two. Occasionally this ends the patient's visits but more often she returns to the clinic in one to four months with a recurrence of symptoms.

Occasionally irradiation of the pituitary has been used for the use of occipital headaches. Much relief is frequently obtained from ¼ gain of phenobarbital three times a day.

Estrogenic therapy, orally, per vagina, and by inunction is useful in the post-menopausal disorders, vaginitis, vulvitis, pruritus valvae, and kraurosis vulvae.

CASE IV. Mrs. G., age 56.

Senile vulvovaginitis with itching, burning and vaginal discharge.

6-12-39: Vaginal smear negative. Returned in 10 days after estrin 4,000 I.U. daily.

6-22-39: Estrin 2,000 I.U. orally daily.

7-17-39: Vaginal smear was follicular in type and there was clinical relief.

10515 Carnegie Avenue.

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Thanks are due Dr. Max Gilbert of Schering Corporation for supplies of Progynon-B, Progynon-DH Ointment, and Progynon-DH Tablets, and to Dr. Don Wonder of Cutter Laboratories for supply of Gonadin.

The Use of A.T. 10 in Chronic Tetany

E. J. RYAN, M.D., and E. PERRY McCULLAGH, M.D.

AMONG the more commonly accepted therapeutic agents in the management of chronic postoperative parathyroid tetany are large doses of calcium administered orally, parathyroid extract, lactose, large amounts of vitamin D, and parathyroid transplants. In our experience, the use of these measures, alone or in combination, has not resulted in the continuous control of all symptoms in every instance. In addition, even though symptoms may be moderately well controlled, the serum calcium may remain below normal range, thus increasing the chance of occurrence of trophic disorders.

Dihydrotachysterol or A.T. 10 is a derivative of irradiated ergosterol and is a result of the researches of Holtz[1,2] and Holtz, Gissel, and Rossmann.[3] It is administered orally as a 0.5 per cent solution in oil of sesame.

In 1938, the literature was reviewed by Albright, et al.[4] Among the more significant effects resulting from the use of the drug are an elevation in the level of serum calcium, a depression in the level of serum phosphorus, an increase in urinary calcium and phosphorus excretion, and a decrease in fecal calcium excretion. In addition, it has been demonstrated that A.T. 10 is apparently cumulative in its action, and can produce dangerous levels of hypercalcemia. Albright[4] showed that A.T. 10 and vitamin D are similar in that each promotes calcium absorption from the intestinal tract and phosphorus excretion in the urine, but that the effect of vitamin D is slower in onset and more prolonged. He further demonstrated that A.T. 10 and parathyroid extract have a similar action in causing increased urinary excretion of phosphorus.

INITIAL DOSAGE

The effectiveness of A.T. 10 in controlling tetany has been emphasized in numerous reports. Initial dosage usually has been placed at relatively high levels (5 to 10 cc. daily), although MacBryde[5] obtained good results with lesser quantities. Maintenance doses have usually varied from 0.5 cc. to 1.0 cc. daily or every other day.

We have treated 14 cases of chronic tetany with A.T. 10 for a sufficiently long period of time and with a sufficient number of observations to warrant definite conclusions. One of the cases represented tetany of renal origin; the remainder were cases of postoperative hypoparathyroidism. The longest period of observation with A.T. 10 has been three years, the shortest two months. Ten cases had been under careful supervision with commonly accepted methods of treatment for one or more years prior to the initiation of A.T. 10 therapy.

Some degree of improvement in the subjective and objective symptoms of tetany was observed in all 14 cases. A strikingly increased sense of well-being has been a gratifying accomplishment of A.T. 10 therapy, and in two cases it occurred on the first day or two of treatment, prior to any measurable shift in the levels of serum calcium and phosphorus.

A rise in the level of serum calcium or maintenance at normal levels after withdrawal of other therapy (except oral calcium) has occurred in all 14 cases treated with A.T. 10. The effect on serum phosphorus has been variable and neither as striking nor as consistent as the serum calcium increase, although the trend has been to lower levels of phosphorus than those encountered prior to treatment.

Dangerous levels of hypercalcemia resulting from A.T. 10 therapy were encountered in two cases. In one, a peak level of 16.2 mg. per 100 cc. developed from the use of 2 cc. of A.T. 10 on alternate days for a total of 17 doses, and 8 grams of calcium lactate daily. In the other, a level of 13.2 mg. per 100 cc. was reached on the fourth day, 5 cc. of A.T. 10 having been administered on each of the three preceding days. Thirty-two grams of calcium lactate were given daily during this time. Each episode was accompanied by severe clinical manifestations. Such delayed rise suggests a cumulative action.

Because of the individual variation in response and the danger of hypercalcemia, we now favor the use of relatively small initial doses (2 cc. or less daily) in practically all cases. In the occasional instance where larger amounts might

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Submitted January 4, 1941.

seem indicated, we now feel that it is safer to initiate therapy by other means (such as oral or intravenous calcium compounds and parathyroid extract), later introducing A.T. 10 in small quantities. Maintenance doses have averaged 0.5 cc. to 0.75 cc. daily or every other day. The importance of accessory oral calcium, usually calcium lactate, should be emphasized. Large amounts, 48 grams or more daily, may be used if necessary. Without it, a larger dose of A.T. 10 becomes necessary, the expense is increased correspondingly, and the margin of safety is lessened.

In four cases, under controlled conditions, the excretion of calcium in the urine was studied. A definitely increased urinary excretion of calcium was noted in three of the four cases, and an increased urinary phosphorus excretion occurred in two of the three cases in which this study was done. Detailed data in these four cases have been published previously.[6]

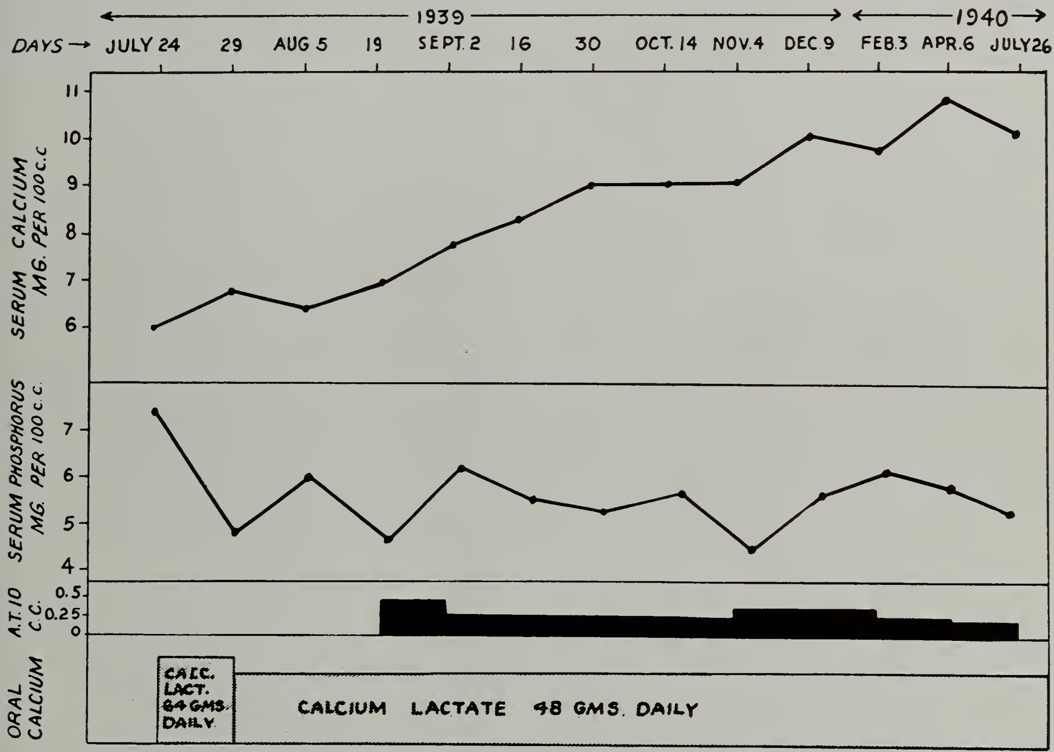

Figure 1

The following two case reports illustrate the various features mentioned above:

CASE REPORTS

Case 1: Patient A. S., a 26 year old woman. Tetany appeared four days after thyroidectomy in April, 1939. Our observations were begun in July, 1939. Previous therapy had included 5 grams of some calcium compound daily and parathyroid extract in acute episodes. General physical survey revealed no significant abnormalities except for strongly positive Trousseau's and Chvostek's signs. A postoperative hypothyroidism was present, and she had received one grain of desiccated thyroid daily. Serum calcium on admission was 5.8 mg. per 100 cc. and serum phosphorus was 7.5 mg. per 100 cc.

Subsequent progress under treatment may be conveniently traced on Figure 1. With large doses of calcium lactate orally, there was a rise in serum calcium to a peak of 7.0 mg. per 100 cc. A.T. 10 was initiated in dosage of 0.5 cc. daily for a week, and the average maintenance dose has been 0.5 cc. on alternate days. The intake of calcium lactate has been maintained at 48 grams daily. In response to A.T. 10 therapy, there was a progressive rise in serum calcium to normal levels, where it has remained. As in other cases, there was no consistent effect on serum phosphorus.

Striking clinical improvement occurred over a period of several months. Symptoms of tetany, even mild paresthesiae, disappeared. General strength and sense of well-being increased. Trousseau's and Chvostek's signs became negative. Occasional mild weakness occurred on the day after using A.T. 10, a difficult symptom to explain, and rare diarrhea was present, probably due to the large doses of oral calcium lactate.

Of importance here are the rise in serum calcium to normal levels with small doses of A.T. 10 in conjunction with oral calcium lactate; the lack of consistent control of serum phosphorus; and the maintenance of the patient in symptomatic comfort.

Case 2: Patient M.A.H., 41 years old. A second subtotal thyroidectomy (recurrent hyperthyroidism) was performed in September, 1936. Symptoms of tetany appeared two days later. From September, 1936, until studies were done in February, 1939, fairly satisfactory control was maintained by the use of parathyroid extract in amounts of 50 to 100 units one to three times weekly, and calcium lactate in average dosage of 32 grams daily. However, a few mild symptoms occurred, which became severe if oral calcium was discontinued for a day or more.

In February, 1939, urinary calcium and phosphorus excretion studies were done under controlled conditions. The results are illustrated in Figure 2. With induction of A.T. 10, there was a rise in the level of serum calcium which continued to levels of hypercalcemia after the drug had been discontinued. Associated symptoms included headache, nausea, vomiting, weakness, and malaise. After a slight delay, serum phosphorus fell. There was a conspicuously increased urinary excretion of calcium and phosphorus for three days during the use of A.T. 10 and for three days after its discontinuance.

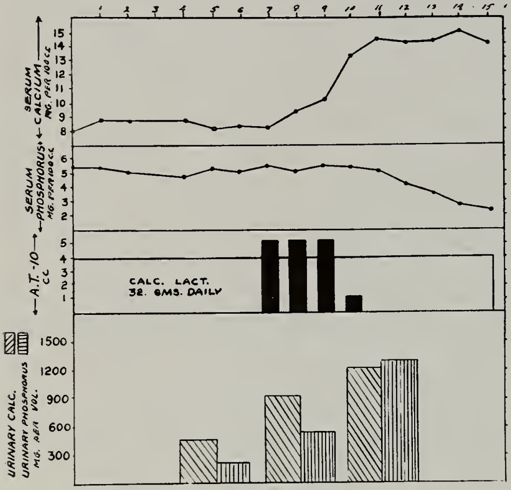

Figure 2

Significant observations here include the rapid rise in serum calcium to hypercalcemic levels, apparently a result of cumulative action; the fall in serum phosphorus; the rather marked susceptibility in this case to the effect of the drug; and the increased urinary calcium and phosphorus excretion.

SUMMARY

The use of A.T. 10 in 14 cases of tetany, one renal, the others postoperative, is reviewed. From this study, it is concluded that:

1. A.T. 10 is effective in the production and maintenance of symptomatic relief, often more effective than other commonly accepted methods of treatment.

2. Serum calcium is elevated by A.T. 10, and can be satisfactorily maintained at normal levels.

3. The control of serum phosphorus is less constant, but the trend is toward production of lower levels.

4. A.T. 10 is cumulative in its action, and potentially dangerous because of possible resultant hypercalcemia. For this reason, frequent serum calcium and phosphorus readings are desirable during the period of initial control.

5. Individual response to A.T. 10 is variable.

6. The concurrent use of large doses of oral calcium increases the efficacy of A.T. 10 and lessens the amount required. Only rarely is it necessary to initiate treatment with more than 2 cc. per day, and maintenance levels average 0.5 cc. to 0.75 cc. on alternate days.

7. Aside from temporary hypercalcemia, no significant untoward effects have been observed from the continued use of the drug for as long as three years.

8. Increased urinary excretion of calcium and phosphorus has been observed with A.T. 10.

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Appendicitis

Seventy-five per cent of the 20,000 annual deaths from appendicitis could be avoided if patients were seen early by their physician and the proper treatment instituted. Our school systems should include in their curricula courses which would provide sufficient general medical information to protect the citizens of tomorrow against tragedies such as ruptured appendix.

Appendicitis requires surgical treatment. A surgeon should determine whenever the diagnosis is uncertain:

(1) Is watchful expectancy reasonably safe?

(2) Do the findings justify operation?

These two points may be determined only by repeated physical examinations and laboratory studies and by intelligent consultation.

He feels that these approaches to the problem of appendicitis should materially reduce the death rate from this condition.—R. G. Robinson, M.D., Detroit; The Jour. Mich. S. M. S., April, 1941.

Diagnosis of Chronic Sinusitis and Allergic Rhinitis

EDWARD KING, M.D. and J. HAROLD KING, M.D.

NEARLY all severe colds in the head are accompanied by more or less involvement of the sinuses. The sinusitis diminishes after the cold clears up in the majority of cases. Acute sinus disease with fever, discharge and pain in the head is not difficult to diagnose, and the treatment consists of simple drainage by shrinking the mucosa and clearing the secretions from the nasal passages. Only under special circumstances where complications are threatened is it wise to use other than simple conservative treatment in acute sinus infections. When the case becomes chronic, a more intricate problem presents itself in that we must determine which sinus is involved in order to institute the proper therapy.

The maxillary sinus or antrum of Highmore is more often diseased than the other sinuses, because of its dependent position and because of its relation to the teeth. It must not be concluded that an infection in any of the sinuses will produce pain. Pain is present only when the opening into the sinus becomes clogged with secretion or swelling, preventing the normal action of the ciliated epithelium which propel secretions out of the sinuses. Very serious antrum infections may be present without any complaint of pain or headache. We have seen many cases of severe antrum infections in which the fetid odor from the discharge was overpowering without subjective symptoms other than the odor.

Frequently a severe cold in the head or an attack of grippe is given as the date of inception. The history will reveal the onset in the majority of patients. The chief complaint consists of dripping into the nasopharynx and spitting up of pus. Sometimes a chronic cough is present. The nose will swell up and frequent colds in the head are common.

TREATMENT

If headache is present, it may be relieved by shrinking the mucosa with cocaine. Ephedrine may relieve the pain, but not always because, as a rule, these patients with chronic nasal disease have used ephedrine to excess so that it may irritate instead of shrinking the mucosa.

Pus may be seen in the middle meatus during the early part of the day before complete drainage has taken place. The pharynx and nasopharynx should be examined for thick purulent secretion which drains from the post nares. Often pharyngitis is present, as a result of the purulent drainage.

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Transillumination will be of great help in antrum infections, unless the bones of the skull are very thick. It is well to compare the transillumination of the frontals and antra to determine the relative thickness of the bony wall. As a rule, if large frontal sinuses are present, the walls are thin and the antra transilluminate readily.

X-rays must be relied upon to give us the size of the antra, and the condition of the mucosa. X-rays must be looked upon as an adjunct in diagnosis and conclusive only after all other diagnostic methods have been followed out. Simple irrigation of the maxillary antrum for diagnosis and for treatment is advisable. This can be accomplished readily by cocainizing the middle meatus and inserting a canula through one of the openings in that area. Often the rhinologist is asked to see a patient in whom there are no signs or symptoms of sinus disease except a report by the radiologist, of an opaque antrum. Here the use of iodized oil is of great value. The sinus mucosa may be somewhat thickened as a result of an old infection, and only by filling the sinus with iodized oil and X-ray again may we be able to rule out infection. Iodized oil is of value also in the treatment of chronic infections of the antrum. Repeated instillations over a few weeks period will often result in a reduction of the swelling and clearing up of the infection.

Frontal sinusitis is almost invariably accom-

Submitted December 24, 1940.

panied by disease of the other sinuses, especially the ethmoid, since the frontal sinus is merely an extension of an anterior ethmoid cell. Frontal sinusitis may produce pain in the supra-orbital region and there may be tenderness over the floor. Examination of the nose will show some swelling of the mucosa between the middle turbinate and the lateral wall with a streak of pus coming from that region. Transillumination is of doubtful value because the frontal sinuses are irregular in size. Quite often one sinus is undeveloped or absent. X-rays should be employed to determine the size and depth of the sinus, as well as the appearance of the mucous membrane. Fluid levels at times are observed.

Treatment of the sinus consists in shrinking of the area of swelling below the floor, that is, the ethmoid area. Mild suction may be employed with success in some cases. At times it is necessary to irrigate the sinus. Freedom of drainage is the important consideration.

ETHMOIDITIS

Ethmoiditis may mean infection of the entire ethmoid labyrinth or it may be confined to a few of the cells, such as are found in anterior ethmoiditis with involvement of the frontal. Because of the irregularity in the development of the ethmoid sinus, isolated cells may become infected without the entire cavity being involved. The examination of the ethmoid must be made by direct inspection alone because transillumination and X-ray are not very conclusive. The middle meatus should be shrunk with weak cocaine solution until the ethmoid floor can be seen. Sometimes it is necessary to push the middle turbinate toward the midline in order to get a good view of the area. Secretion may be seen coming from the cells when infection is present. A great deal of information can be obtained by the use of a postnasal mirror for inspecting the posterior ethmoid cells, and the naso-pharyngoscope can be employed to advantage also in inspecting the ethmoid area. Repeated inspection may be necessary before a diagnosis can be made.

Fortunately the ethmoid is in good position for drainage so that careful use of shrinking solutions and irrigations with normal saline will promote the evacuation of retained secretions. Operations for drainage are necessary only when hyperplastic degeneration has taken place or where the cells have become chronically diseased after long suppuration.

Infection of the sphenoid sinus is not so common. Because of the relationship of the sphenoid to other important structures such as the optic nerve, and the vidian nerve, it must be investigated when lesions of these structures are present. Access to the sphenoid is readily obtained through the superior meatus, or, in other words, through the area between the septum and the upper part of the middle turbinate.

A small canula can be inserted into the lumen of the sinus without much difficulty. The sphenoids are developed irregularly. One sphenoid may occupy the entire space alloted to two cavities, thus leaving a small sinus on one side and a very large one on the opposite side. For this reason we use iodized oil and X-ray to determine its size and position. A small quantity, 3 to 4 cc. of iodized oil is injected into the sphenoid and X-rays made in the antero-posterior and lateral positions. If the sphenoid extends far out laterally, we assume that there is danger to important structures from an infection in this sinus. The iodized oil is of great benefit to the mucosa and improvement very often occurs after an instillation of oil. Irrigation of the sphenoid for diagnostic purposes is of value as well as for treatment.

In the handling of chronic infection of the sinuses, due consideration must be given to the general health of the patient. The local condition must be cleared up as rapidly as possible, and the patient's general resistance to infection should be stimulated. The family doctor must be depended upon to guide the patient along the right lines. Treatment of sinus infection is at times a long drawn out and trying experience for the patient, as well as a difficult and delicate task for the rhinologist. If the problems involved are carefully explained to the family doctor, as well as to the patient, the task is made easier.

Instructions as to diet must be given. A suitable diet consists of milk daily and adequate amounts of eggs, butter and cheese, green vegetables, fish or meat and fresh citrus fruits. Sweets, bread, and pastries, as well as alcohol should be excluded. Vitamin A should be added to the diet.

Ultra-violet irradiation is of great value. Natural sun bathing in the open air is of the greatest value, but in the winter months we must depend upon the artificial means. Stock respiratory vaccines are given in some cases. Autogenous vaccines have not given better results than stock vaccines. Our experience with autogenous vaccines has not, however, been extensive.

PREVENTING COLDS

For the past few years we have been using contrast baths as a means of preventing colds. We believe that they have value as a means of raising resistance of the body surface to sudden changes in temperature. Home surroundings should be considered in the treatment of chronic or recurrent sinus infections, especially in children. There may be some one in the family or one of the servants who has a chronic sinus infection whose contact constantly reinfects the patient under treatment. Air conditions in the home should also receive consideration. The sleeping rooms should be carefully ventilated and the air well humidified. It must not be forgotten that endocrine disorders enter into the picture in exceptional cases. Therefore, in considering the general condition of the patient, one must give thought to a low metabolic rate wherein thyroid medication produces a welcome change for the better.

ASTHMA AND VASOMOTOR RHINITIS

It has been observed repeatedly that where a large number of remedies are recommended for one disease, the real understanding of the problem is clouded with doubt and uncertainty. This observation has applied to asthma in particular, and to vasomotor rhinitis. Today we are beginning to understand the etiology of these related disorders and clearer thinking is evident along lines of treatment. Without careful study of each case as it comes under our care, we cannot hope to fathom the problems presented. To urge one to study each case carefully as a study in itself is merely reiterating a principle which has been the maxim of great medical teachers. However, it does not do harm to warn against too hasty appraisal of the patient without the details of history to build upon. For this reason I am giving in detail below the results of an examination which is necessary in all cases complaining of nasal symptoms. The case given below is a borderline case and it seems to me that detailed history and physical examination are of interest.

Mr. J. M. Smith consults the nose and throat specialist after constant urging by his family and business associates. He complains of blocking of the nose, constant "colds" in the head, in fact he says that he catches a new cold every two weeks. There is dripping into the throat and quite often the throat gets sore. Sometimes he develops a cough. Mucous can be blown from the nose at any time of the day or night.

From our experience the determination of the specific cause of nasal symptoms has an important bearing on the treatment and prognosis. Recognizing that the causes of nasal symptoms are often obscure, the following conversation is related in order to indicate the method of approach:

Doctor: "How long have you been bothered with this condition?"

Mr. Smith: "About two or three years, maybe longer."

Doctor: "Is it the same in winter and summer, in other words, all year 'round?"

Mr. Smith: "Yes, I have just as many colds in summer as I do in winter."

(Note: Nasal symptoms due to infection, as a rule, are abated or clear up in warm weather.)

Doctor: "Does your nose run?"

Mr. Smith: "Yes, at times, especially when I first catch cold."

Doctor: "Is the secretion watery or thick?"

Mr. Smith: "At first it is watery, and then it gets thick."

(Note: Profuse persistent watery discharge is characteristic of allergy.)

Doctor: "Is the discharge yellow?"

Mr. Smith: "No, it is thick white mucus."

(Note: Infectious nasal conditions are characterized by purulent secretion.)

Doctor: "Do you sneeze?"

Mr. Smith: "Yes, I do, but only when I wash my face."

(Note: Paroxysms of sneezing are characteristic of allergy.)

Doctor: "Is your nose stopped up a great deal?"

Mr. Smith: "Yes, but worse at night."

Doctor: "Do you have to clear your throat often?"

Mr. Smith: "Yes, I am constantly clearing my throat and spitting up thick white mucus which drops down from my nose and sometimes causes a sore throat."

(Note: Post nasal drip is a common complaint, especially in certain parts of the country and is not significant of sinus disease, unless accompanied by other important evidence.)

Doctor: "Do you have headache?"

Mr. Smith: "No, I often wonder why I don't have headache with this sinus trouble."

(Note: Headache often accompanies sinus disease. It is the pressure type of headache, as a rule due to the retained secretions. The pain very frequently begins about one hour after arising and reaches a peak during the morning and disappears later in the day. Antrum disease produces pain in the malar region or in the infra orbital region. Pain from the frontal or anterior ethmoid cells occurs in the supra-orbital area and sometimes at the root of the nose. Headache arising from the posterior ethmoid cells and sphenoid is characterized by pain beginning in the temporal region, running back to the occiput, often being referred to the back of the eye and to the ear.)

Doctor: "Do you have fever and pains in your body or other general symptoms when the colds begin?"

Mr. Smith: "No, the colds do not interfere with my work or habits."

(Note: Generally with infections of the nose there is slight fever and some malaise.)

Doctor: "How did this trouble originate? Was it the grippe or the flu?"

Mr. Smith: "I don't recall, although I haven't had any severe illness."

(Note: Very often sinus disease has its onset with a severe cold or grippe.)

Doctor: "Do you have periods when the cold is not present, or do you have symptoms constantly?"

Mr. Smith: "No, I seem to have a cold in my head constantly."

(Note: Infectious colds should give some immunity for periods of five or six weeks.)

Doctor: "Does your cold end abruptly or gradually clear up?"

Mr. Smith: "I seem to have it constantly."

(Note: Infectious colds clear up gradually while very often allergic conditions end abruptly if the cause is removed.)

Doctor: "Do you have chest symptoms, cough or asthma?"

Mr. Smith: "No asthma, but sometimes a cough develops."

(Note: If asthma is present, allergy is more apt to be suspected; whereas a cough is more commonly present at the end of an infectious cold. Sometimes a patient does not know what asthma is and confuses asthma with a cough.)

Doctor: "How is your general health?"

Mr. Smith: "Excellent."

(Note: We make it a rule to inquire into the history of infectious diseases, such as scarlet fever, measles, pneumonia, etc.)

Doctor: "Have you ever been operated on?"

Mr. Smith: "No."

Doctor: "Have you ever had hay fever, asthma, eczema or hives?"

Mr. Smith: "Yes, I have had eczema every year for the past seven years."

(Note: Infantile eczema, hives, hay fever and asthma point to a predisposition to allergy.)

Doctor: "Does any one in your family have any of these conditions?"

Mr. Smith: "No."

* * *

The doctor now proceeds to make an examination with the following result:

(Note: The nasal mucosa is slightly reddened. The mucosa is pale in allergic conditions and red in infections. It is very important to note the appearance of the mucosa, because it is of significance. Sometimes the mucosa is edematous or polypoid. Allergic conditions most often produce polyps, although polyps do occur as a result of infection.)

The septum is in the midline and the turbinates on the left side are somewhat swollen.

(Note: When the septum is straight, there is less danger of obstruction and infection.)

With the postnasal mirror, the mucosa of the turbinates and septum appear pale. There is a small amount of mucoid secretion on the posterior wall of the pharynx, but there is no inflammation. The tonsils are submerged, but no secretion can be expressed. The hypopharynx and larynx are normal. The drum membranes are normal.

The patient is now requested to blow some secretion on a glass slide. The slide is dried and stained with Giemsa's stain. Microscopic examination shows a few cells. Two-thirds of these cells are neutrophiles and one-third are eosinophiles.

(Note: If pus were present, a large number of cells would be found, mostly neutrophiles, with an occasional or no eosinophiles.)

In order to shrink the mucosa so that all the spaces may be examined, a strip of cotton wrung out of 1 per cent cocain is placed in the area between the turbinates and septum.

Transillumination shows the antra and frontals very bright.

The strip of cotton is removed and we find the turbinates shrunk sufficiently to allow a view of the middle meatus, the nasofrontal area and a fair view of the superior meatus. No pus is seen, but some mucoid secretion is seen in the middle meatus. Otherwise, the nose appears normal.

The nasopharyngoscope is sometimes employed where a deviation of the septum is present or in those cases in which it is difficult to examine with the post nasal mirror.

X-ray of the sinuses may be considered at this point also.

The patient is now referred to the allergist for consultation. After careful consideration of the history and intra-dermal skin tests, the patient is found sensitive to house dust and chocolate. Instructions as to diet and the method of avoiding dust are explained and the patient instructed to return in one week.

* * *

The case recited above represents a patient who consulted me recently. It is given in detail in order to demonstrate the amount of information that can be obtained from a painstaking history and a thorough examination. Since about one-third of the cases which consult the otolaryngologist are allergic in origin, it becomes increasingly important for all physicians to be fortified with the necessary information to enable them to reach correct conclusions in these cases. The patient who consults the laryngologist complaining of constant sneezing, itching of nose and eyes and stuffiness is obviously an allergic case and the beginner knows the answers to the problem. It is the borderline case which is baffling and which in our experience is the most common.

The above case has been observed over a period of six months. His symptoms have almost completely disappeared. He observes his diet and sleeps in a dust-free room. Some of the dust secured from his home was employed for testing and he was found very sensitive. Injections of the dust were used over a period and the patient feels that he has obtained great relief from these injections.

1002 Carew Tower

Radiation of Urogenital Tumors

Most kidney tumors as well as those of the bladder and testicle are radiosensitive and should have preoperative deep X-ray therapy for the double purpose of reducing their bulk and destroying and devitalizing the more sensitive and malignant cellular elements. This makes the removal of large tumors mechanically easier and lessens the danger of metastases resulting from operative trauma. Operation should follow in two or three weeks.

Postoperative radiation is generally advisable. Bladder carcinomata are usually radiosensitive to a moderate degree, and will give a good primary response which will often transform an inoperable growth to an operable one. Tumors of the testicle, especially teratoma testis, are radiosensitive and should always have preoperative X-ray therapy covering the regional gland areas as well as the primary source, followed by simple orchidectomy and postoperative radiation. Carcinoma of the prostate is radioresistant and X-ray therapy is best reserved for the relief of pain.—Harper G. Sichler, M.D., Lansing; Jour. Mich. S. M. S., April, 1941.

Ventricular Paroxysmal Tachycardia From Adrenalin and Sinus Standstill From Intravenous Quinidine In a Case of Coronary Occlusion

ROBERT C. KIRK, M.D. and E. M. KILPATRICK, M.D.

THE following case of coronary occlusion is being reported because the patient developed two of the serious complications from medications which are commonly employed in the treatment of this disease.

L. B., age 38, was first seen on March 12, 1939, complaining of indigestion of one week's duration. He first consulted a physician six days after the start of his epigastric distress because of severe and intractable vomiting, accompanied by sweats, and aching in both shoulders, more on the left. The aching was "muscular" in character and the patient thought he had arthritis of the shoulder.

His past history was not remarkable, and the review of symptoms disclosed only an indigestion-like feeling following hard work or fast walking of about six months duration.

Physical examination disclosed an emaciated, sweaty, pale, obviously ill individual. The pulse was 100 with normal sinus rhythm. The blood pressure was 120/80. The pupils were somewhat constricted due to an injection of morphine given six hours previously. Examination of the heart disclosed a heaving maximum impulse in the fifth left interspace in the nipple line. The second aortic sound equaled the second pulmonic sound. There was a slightly roughened first aortic sound. No murmurs were heard. Fluoroscopy of the chest revealed an apparently enlarged heart, which by cardio-thoracic ratio was found to be 0.48, but when the calculations were determined by the formula of Hodges and Eyster,[1] his heart was approximately $33\frac{1}{3}$ per cent larger than the normal calculation for his age and weight.

He was given erythrol tetranitrate, one tablet under the tongue, with no relief, and it was suspected that the protracted vomiting might be a result of the hypodermic. He was advised to go home and stay in bed. At 10:00 on the night of the first day that he was examined and on the seventh day of his symptoms he was still vomiting and it was felt that hospitalization was necessary.

Upon admission to the hospital his blood pressure was 90/70. His oral temperature was 101.6 F. His white blood count showed 24,500 cells, 90 per cent polys. There were no other changes in his physical findings. He was given a quarter grain of morphine (.015 gms.) subcutaneously with some relief of his symptoms.

The following morning an electrocardiograph was taken (Fig. 1) which showed right axis deviation, inverted T_1 with deep S_1 and a less deep S_2. The QRS complexes were markedly reduced in size and split in all three leads. There was a nearly absent initial positive deflection in the fourth lead. It was felt that he had had an anterior coronary occlusion.[2]

He remained in the hospital and was treated with absolute bed rest, frequent small feedings, aminophyllin 0.1 gms. four times a day, and sedation. On the fourth hospital day he developed extreme shortness of breath, and extreme orthopnea.

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● Dr. Kilpatrick, Columbus, Ohio, is a graduate of Ohio State University College of Medicine, 1934; medical staff member at Grant, Mt. Carmel, St. Anthony's Hospitals and Franklin County Tuberculosis Sanatorium.

On physical examination he was found to have rales at both pulmonary bases. Because of the progressive pulmonary edema he was given digitalis in full digitalizing doses (1.8 gms. in 24 hours, according to the method advised by the New York Heart Association). Three days later

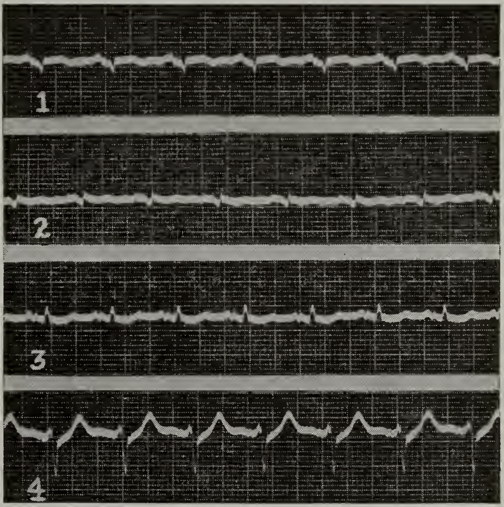

Fig. 1. The extremely low amplitude and splitting of the Q.R.S. complexes in the three standard leads indicates considerable myocardial damage. The atypical $Q_1 T_1$ appearance suggests an anterior infarction. The absence of R_4 is further evidence in favor of myocardial infarction. This record was taken 30 hours after the onset of his acute attack of vomiting and pain.

Submitted October 10, 1940.

the rales at his bases had cleared, and he felt so well that he insisted upon being taken home.

Following removal to his home his condition progressed satisfactorily until the morning of the eleventh day after he was first seen. That morning, following a routine electrocardiographic tracing (Fig. 2), he was seized by a terrific substernal and mid-epigastric pain of excruciating nature followed by three liquid black stools. When seen, no blood pressure could be obtained. There was no pulse at the wrist. He was sweating profusely, pallid, cold, and cyanotic. Only his respirations gave evidence that he was alive. He was immediately given 1 cc. of adrenalin intramuscularly and 50 cc. of glucose, 50 per cent solution, intravenously. In about 15 minutes his blood pressure had risen to 60/40 and his pulse could be obtained once more at the wrist at a rate of about 58 to 60. Upon resuming consciousness he still complained of terrific pain and a half grain of morphine (.030 gms.) and a half cc. of adrenalin were given together subcutaneously. Thirty-five minutes after the administration of the adrenalin, while auscultating the heart, the rate suddenly changed from 58 to 150. The sounds were quite tic-tac in quality and the rhythm was otherwise apparently normal. No pulsations were seen in the jugular veins in the neck. No slowing could be obtained by carotid sinus pressure.[3]

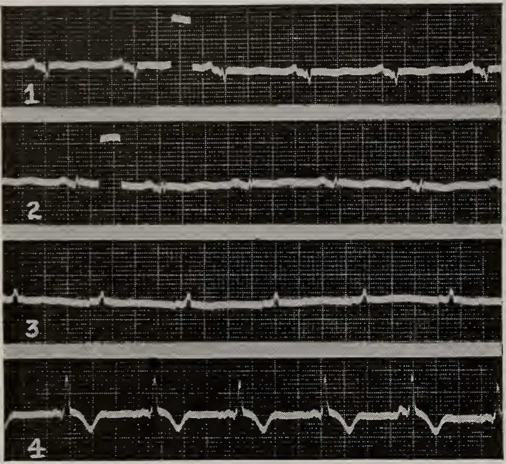

Fig. 2. Portable record taken on the eleventh day while in bed at home—note the return of T_1 from negativity in spite of full digitalization. Graybiel and White[7] state that an old infarct at the apex with inversion of T_1 and upright T_3 may be complicated by a new infarct at the base with upright T_1 and inverted T_3—giving a much more normal appearing electrocardiogram. This identical relationship was found at autopsy. Lead 4 was taken with a reversal of leads and actually shows no change.

An electrocardiogram was obtained at 1:00 P.M. (Fig. 3) which showed a ventricular tachycardia. At this time the extremities had become somewhat warmer, the pain had decreased considerably, and the blood pressure had risen to 88/60. The patient seemed to be in reasonably good spirits. However, the rapid heart rate was considered prognostically dangerous and it was decided to give him quinidine intravenously. Accordingly, at 5:00 in the afternoon two grains (0.133 gms.) were given intravenously diluted in salt solution with no effect upon his rhythm. At 6:00 P.M., four grains (0.266 gms.) were given intravenously in salt solution still with no effect upon his rhythm. At 10:00 that night he was having an increasing number of rales at both lung bases, his blood pressure was approximately the same, his pulse was well felt at the wrist, and his heart sounds were not changed. At this time it was decided to give him ten grains (0.666 gms.) of quinidine intravenously in 50 cc. of salt solution. While this solution was being prepared he again complained of very severe mid-epigastric pain, broke out in a cold sweat, and a second physician, Dr. E. M. Kilpatrick, who was present, went out of the room to prepare a further dose of morphine while the quinidine was being given intravenously. No check was made of the heart rate as the 50 cc. of quinidine solution were being given. At the end of the injection of 45 cc. the patient was suddenly noted to be pulseless. We did not dare give further adrenalin; however, his breathing continued for approximately ten minutes longer although no heart sounds could be heard. Artificial respirations were resorted to for some time to no avail.

AUTOPSY FINDINGS

The autopsy was performed by Dr. Horace Davidson.

Lungs: The surfaces of the lungs are roughened by fairly numerous adhesions. The lungs are heavy and boggy in consistency. The cut surfaces exude tremendous amounts of fluid. The bronchial tree contains some frothy mucous. There are no areas of abnormal pigmentation or fibrosis.

Heart: The heart is considerably enlarged, having an estimated weight of between five and six hundred grams. Its external surface is smooth. When opened, the right auricle, tricuspid valve, right ventricle, and pulmonary valve are largely normal in appearance. The left auricle shows some dilatation. The mitral valve presents some atherosclerosis at its base. The posterior wall of the left ventricle is of a homogeneous yellowish color, and is extremely soft and friable in consistency throughout its entire extent. The anterior wall of the left ventricle is extremely thin and consists largely of fibrous tissue. At one point the anterior wall is only 2 mm. thick. Adherent to the inner surface of the anterior wall and the inner surface of the apex is a large, rather firm, grayish brown blood clot. There is no apparent clot adherent to the

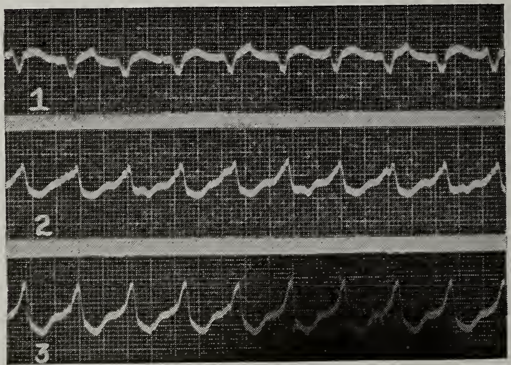

Fig. 3. Portable record taken on the eleventh day nine hours before death. Paroxysmal ventricular tachycardia is present with a heart rate of 150.

freshly infarcted posterior wall. The aortic valve and aorta show moderate atherosclerosis. The common portion of the left coronary artery shows atherosclerosis with calcification and with almost complete closure of the lumen. A branch of this artery passing to the general portion of the heart showing the most marked fibrous scarring, apparently has a completely occluded lumen. The cross section of this artery gives the appearance of a solid fibrous cord. These changes appear to be of comparatively long standing. The posterior circumflex branch of the left coronary artery also shows extreme thickening of the wall, due to atherosclerosis. The lumen in many areas is almost pinpoint in size. At about the point where the posterior circumflex artery bends to go down the posterior surface of the interventricular septum, the small remaining lumen is plugged by a fairly firm, grayish brown clot. The right coronary artery shows atherosclerosis, practically as severe as that described in the left. There is, however, no evidence of recent thrombosis.

Gastro-Intestinal Tract: The stomach, duodenum, and first foot and a half of the jejunum are normal in appearance. Beginning about a foot and a half from the origin of the jejunum the mucosa changes abruptly from a normal to a diffusely hemorrhagic appearance. This process extends to within about six inches of the cecum. Throughout this area the mucosa is completely hemorrhagic and the lumen is filled with blood. The process begins and ends very abruptly. The superior mesenteric artery is found to be filled with ante mortem blood clot. The branches of this artery supplying the cecum and colon are not involved. The large bowel is normal except for containing considerable blood.

MICROSCOPIC EXAMINATION

Heart: Sections of coronary artery show marked atherosclerosis. A section from the anterior descending branch of the left coronary artery shows complete occlusion by fibrous tissue. This appears to represent an organized thrombus of long standing. Other sections of coronary artery show marked sclerosis. None of these happen to contain the area of recent thrombosis found in the posterior circumflex branch of the coronary artery. A section from the anterior wall of the left ventricle shows it to be extremely thin and to consist mostly of adult scar tissue. Some fresh unorganized blood clot is adherent to this wall. Sections from the posterior wall of the left ventricle show widespread myocardial necrosis, considerable hemorrhage, areas of fibroblastic proliferation, and masses of organizing blood clot attached to the endocardial surface. A section of aorta shows considerable hyaline thickening without much fatty deposition.

Intestine: Sections of small bowel show an area characterized by superficial necrosis and by marked dilatation of arteries and veins which begins quite abruptly and is sharply marginated. A section of mesenteric artery is normal except for the presence of some ante mortem blood clot.

DISCUSSION

This case presents two of the dangerous complications of medication in the treatment of coronary occlusion. The interesting point in his history is the fact that he did not have substernal pain at the onset, the pain being uncharacteristic in that it was localized in the shoulder. The electrocardiographic tracing was typical enough to establish a diagnosis.[2] The use of adrenalin in coronary occlusion is recommended by the various text books in cardiovascular collapse, and it was felt perfectly justifiable in this case to give it; however, it would seem evident that its use was followed by paroxysmal ventricular tachycardia. The use of quinidine intravenously might possibly be questioned; but the patient was nauseated to the extent that he could take nothing by mouth, and for several hours during the period of medication was semi-comatose and unable to swallow. It is said[6] that quinidine should be given with constant check of the pulse rate and the drug should be stopped immediately if there is a change in the rhythm. This case presented a complication which made it impossible to have a constant check on the heart rate, although probably the medication should have been discontinued while the second physician was absenting himself from the room. The autopsy confirms the diagnosis of coronary occlusion with the interesting finding of a large mesenteric occlusion which unquestionably had occurred at 10:00 in the morning at the time of the first severe mid-epigastric and abdominal pain and tarry stools. The shock was a natural accompaniment of this large occlusion and explains the patient's failure to adequately respond to repeated doses of morphine of a half a grain (.030 gms.) given for pain.

SUMMARY

A case of coronary occlusion is presented which developed ventricular tachycardia following the use of adrenalin chloride in a digitalized heart. Efforts to restore normal rhythm by intravenous quinidine were followed by sinus arrest and sudden death. An autopsy disclosed an old anterior coronary occlusion with a recent posterior coronary occlusion complicated by a large mesenteric infarction.

370 East Town St.

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Justification for Relation of Focal Infection To Systemic Disease

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THERE is a grave possibility, that the recent articles appearing in the literature emphasizing the doubtful nature of focal infection in systemic disease, may be read and misunderstood by many who are unacquainted with the fundamental work on which the theory of cryptogenic infection was erected. This would be a grave injustice to the honest meticulous labors of those early workers. The situation provides moreover a new therapeutic difficulty in as much as not only patients but many physicians seem to have concluded that the whole theory was a myth.

It is evident that two individuals may conduct experiments from which they derive opinions, the one well controlled, the other less well controlled, and the conclusions will have different values. It is true that many of Rosenow's experiments have not been verified by other investigators; but it is equally true that independent investigators, when they took the precaution to follow Rosenow's technique, arrived at the same findings. It is obvious that a failure to corroborate his work with a different technique does not invalidate the accuracy of the truth of his work.

This article, it is hoped, will recall to attention certain investigations that have been either ignored or passed over lightly, without adequate reason, for they were works that established facts; while on the other hand, those who have renewed the attack upon the theory of focal infection have been willing to accept other reports many of a purely clinical nature and only expressing opinions.

A prejudiced observer has difficulty arriving at an unbiased conclusion unless he adheres closely to fact. Now, that bacteria isolated from lesions in the head of individuals suffering from a particular local or general disease also produce identical local or general pathology in experimental animals, from which lesions an organism could be obtained with identical characteristics, is a fact. That this occurred too frequently to be due to chance, particularly in comparison with accurate controls, is a reasonable opinion. This was the work done by Billings,[1] Davis, Jackson and others. It follows, one must abandon Koch's law as to the etiology of bacterial disease if he is to question Billings' conclusions, e.g., that localized silent lesions in the head may be responsible for systemic pathology.

The Author

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Here one must stop and realize that the advocates and supporters of Billings' theory do not conclude thereby that all systemic pathology of a doubtful nature is due to focal infection. That is an abuse of the theory but it was due to faulty reasoning and mistaken logic in applying the theory to an unwarranted degree; however, by the same token, this abuse and faulty reasoning does not destroy the veracity and the validity of the original limited conclusions.

The present reaction in some quarters no doubt is due to an impatience with the ruthless eradication of all possible foci of infection, instead of conservatively first, determining a focus of infection, and then, removing it. There is no more excuse in removing possible foci because they might be, or might become infected than there is in routinely removing a readily available appendix at the time of a pelvic operation. But this is an abuse and we do not change systems or principles because of their abuse.

Shambaugh,[2] in 1926, published an excellent sweeping article on this subject and condemned this "type of faddist as a pest". Many of the recent opposing references uphold the relation of infected foci to systemic disease but question only the manner in which it is produced.

For instance, Holman admitted that "streptococci do localize in various organs so that their potential danger in infected foci cannot be neglected but questioned the factors determining the localization." In spite of this frank statement the recent writers refer to Holman's[3] work as an investigation which throws doubt upon the tenability of the theory of focal infection.

Hunter in 1910 may have spoken of infection from crowns rather than apical abscesses; but he did recognize the relation between the infection in the mouth and distant systemic pathology.

Certainly there is a question of X-ray studies of teeth; but the subject cannot be dismissed arbitrarily without at least a consideration of the

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Submitted October 3, 1940.

experimental work of Haden[4] in 1928 dealing with the quantitative cultures of 600 pulpless teeth which he considered X-ray negative. Whether they be referred to as dead teeth or pulpless teeth is academic if it can be proved that they may be infected.

X-RAY STUDIES OF TEETH

By his technique 46.2 per cent of such teeth were found to have 10 or more colonies to the tube. As a control there were taken cultures of 400 vital teeth that were X-ray negative. Only 4.8 per cent of these had 10 or more colonies to the tube; 500 teeth with positive X-ray evidence of bone destruction produced 10 or more colonies in 62.8 per cent. Streptococci were the predominating organisms in all cultures.

Comment should be made on the work of Rhoads and Dick.[5] Careful technique was used to avoid contamination, and all critics know that the controls are liable to the same contamination and that the difference in the two series is too great to be credited all to chance contamination.

In view of the results of quantitative cultures it seems justifiable to regard all pulpless teeth as possible foci of infection regardless of whether one considers them dead teeth or not.

Haden[6] working separately but adhering rigidly to the technique of Rosenow was able to duplicate his work. It is a question whether diverse opinions by others, particularly negative results, were not due to personal modification of the technique, all too common in investigation and therapy.

Too frequently it is proposed in an inconsistent way that the benefits of tooth extraction are due to "psychic factors or the shocklike reaction which often follows such operations", and at the same time to emphatically declare that harmful effects, if they occur, were all due to an exacerbation of symptoms following the removal of the suspected foci.

Likewise it is incomplete to say, as some do, that "ophthalmologists feel that one-third of the cases of iritis are due to focal infection, yet little or no proof exists for this belief, except the improvement which occasionally follows the extraction of teeth".[7] Now that is a deliberate statement and would imply that no experimental work supported the relation of focal infection and iritis; yet it is a fact that T. J. Cook[8] in 1929 established an incidence of iritis in 45 per cent of 40 rabbits which were given injections of streptococci obtained from 10 patients who had iritis. These rabbits were killed within 72 hours of the initial injection. Surely it can not be explained on a basis of coincidence.

It gives a false perspective to emphasize, as is frequently done, in talking of systemic disease, that 40 to 60 per cent of lung abscesses follow tonsillectomy and other operations. This is a misleading statement even if true. The correct hazard of tonsillectomy would be to quote the incidence of lung abscess in relation to the total number of tonsillectomies. Dr. Wm. Turnley[9] reports 76,000 cases of tonsillectomies without hemorrhagic death and Breuning[10] reports 1800 tonsillectomies in ages from one year to 78 without a single death from any cause.

Every one will agree that the tonsils and the teeth or the sinuses should not be held accountable for systemic disease without logical clinical reasons having been determined; but that abuse exists because criteria are not adhered to or because it is expedient; "must do something"; or it is profitable financially. The existence of this abuse does not destroy the fact that focal infection may produce systemic disease.

The work of Noble James and S. J. Newsom in 1932[11] established the fact that there is a relation, in dogs at least, between dental infection and cardiac change. Its application may be open to controversy but not the fact of the experimental work.

All of the literature referring to failure of cure on the removal of focal infection was anticipated by Billings[12] when he emphasized that this primary infection may set up permanent secondary foci which may act as a causative agent when the primary foci are removed too late. "And if what I have just said is true then the removal of the foci has not disturbed the organisms in the tissues of the body. If you have removed the true focus you have simply prevented the invasion of the tissues by additional organisms from the primary focus".

Undue importance is extended to the work of Ellis and Russell concerning the incidence of cervical adenitis in Basque children removed to England; the relation of tonsillar hypertrophy and adenitis is interesting and might reflect the effect of climate on the incidence of respiratory infections. They emphasized that while the Basque children had large tonsils, there was very little incidence of cervical adenitis or running ear and that the incidence of respiratory infection was low compared to English children who had bad tonsils. But that is an improper correlation. The effect of the English climate in contradistinction to that of the Spanish Peninsula after three or four years might very easily give a much higher incidence of adenitis and ear trouble with the tonsils undisturbed. The two groups cannot be compared unless in the same environment.

Reference is sometimes given to the work of McCollom who noted no benefits in 70 patients after tonsillectomy in cases of rheumatoid arthritis. In view of the fact that it is generally agreed that, in rheumatoid arthritis about 25 per cent improve no matter what type of treatment is used, it is obvious that the McCollom Group is probably too small because he does not report the 25 per cent that improve in spite of the treatment.

It is unfair to compare, as is done in certain quarters, infected tonsils or teeth with the initial lesions of tularemia, glanders, anthrax and so forth, because of the very nature and location of the primary lesion. In the one, the invading organism is only an infrequent contact, the host has no immunity, and the entry is associated with the breakdown of the epidermal protective barrier; the other is an infection with an agent of frequent exposure to which there is a partial immunity in a tissue that functionally acts, in the light of our present knowledge, as a portal of entry. The same observation holds for chronic bronchiectasis, lung abscesses, and infection of bone, where there is a pathological protective walling off, whereas, in the cryptogenic infection, because of its primary function as a portal of entry and resulting sensitization, no such local reaction occurs or protective walling off results.

COMMENT

The recent reopening of the controversy on focal infection has done a distinct service in calling attention to, and condemning the ruthless removal, without adequate criteria, of tonsils and teeth as well as all tinkering procedures on sinuses, prostates and cervices. But this terrible abuse does not invalidate the fundamental principles of the relation of localized infection with distant systemic pathology. The association of improvement in general conditions on the removal of the obvious pathologic foci is too frequent to be, "post hoc ergo propter hoc", at least in private practice, particularly when the removal is performed by a skillful consultant. Beneficial effects can no more be ascribed to shock or psychic factors than can the occasional postoperative poor results.

If the therapeutic principle is adhered to, that the hazard of therapy must always be less than the hazard of the disease, then the removal of the obvious foci of infection will improve or prevent much of the chronic invalidating disease that enters our offices in the fourth and fifth decades of life. In spite of the critical attitude regarding the continued acceptance of focal infection as an entity it should be acknowledged that there is adequate evidence that this concept is in accord with sound reasoning supported by strong experimental evidence.

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The Child Versus the Adult

The child finds himself in conflict with his instincts and emotions on the inside and the ideas and ideals of the adult on the outside. This leads him to hold in or repress his normal emotions and causes him to become timid, tense, uncertain. And so he lays down a reaction pattern which is abnormal in itself and, under stress and strain of circumstances in adult life, these fundamental or foundation methods of reacting come to the forefront, leading to what we term "nervous disorders". Once fear is acquired, it is even more harmful when it is not freely expressed and manifested, for the emotional force involved is more devastating than any of the forces which the external world can bring upon the person. This internal struggle is more malignant to the peace of mind than cancer is to the physical body. The animals lower than man are more natural than he, for they express their fears freely. While it is essential to understand "fear" in general and how it influences the child, we cannot eliminate fear without first knowing its cause. Are we afraid of things with which we are familiar? Or is it the unfamiliar which makes us uncertain and ill at ease. Unquestionably ignorance is the cause of fear. Unquestionably knowledge and truth constitute its cure.

We have a definite duty to the child. We should accord his thoughts and feelings the same measure of respect which we demand for our own. We should honor his convictions and encourage him to develop himself. We should help him to develop his own individuality. The child is both a joy and a responsibility, and the world will be a happier and more normal place when adults have learned to "live with the child".—E. H. Williams, M.D., Richmond; Va. Med. Monthly, Vol. 68, No. 2, February, 1941.

Weil's Disease

LOUIS N. JENTGEN, M.D.

WEIL'S disease is a specific, epidemic, hepatitis caused by the Leptospira-icterohemorrhagicae. This spirochaeta has hook-like ends whose normal habitat is in the wild rat, appears in urine and feces, and is transmitted to man probably through the wet skin or by the gastro-intestinal tract.

The disease is most prevalent in Eastern countries but appears to be found generally throughout the world where wild rats are prevalent. Recently an epidemic was reported in Buffalo among the wharf hands who bathed in the water surrounding an old, rat infested wharf. Sporadic epidemics have been reported during trench warfare. To my knowledge only a few cases have been actually identified in and about Franklin county.

The disease has an explosive onset and is characterized by a peculiar type of jaundice, severe chills, pyrexia, and prostration. There is a marked hemorrhagic tendency. The liver and spleen may become large and painful. The stool and urine contain bile pigments. An acute, kidney lesion is early demonstrable. There is also found an early anemia and a moderate leukocytosis.

The spirochaeta may be identified in the blood and urine by dark field examination. Guinea pig inoculation is a useful diagnostic procedure. The prognosis is serious, mortality ranging from 30 to 40 per cent. Treatment is purely symptomatic, although an antiserum has been developed which appears to be somewhat efficacious if administered early in the disease.

The spirochaeta that causes this disease was recognized by Noguchi who thought at that time that it was the causative agent in yellow fever. Subsequent investigation proved that Weil's disease differed considerably from yellow fever and that the causative agent in yellow fever was a virus.

Mrs. J. H., a farmer's wife, age 36, had always enjoyed good health. She was the mother of two normal children. On Aug. 4, 1940, the family went to a small woods at the rear of their farm for a picnic and while there drank from a small spring. There were old timbers on the ground which were rat infested. On Aug. 12, 1940, while feeding chickens at 5 A.M. she became nauseated and vomited and had a severe chill. Although the weather was very hot, all methods to cope with this chill appeared inadequate. Later that day she was taken to her family physician, who found her very toxic, slightly icteric, with a temperature of 104 degrees, axillary.

The Author

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The doctor prescribed symptomatic medicine and told her to stay in bed. Because of the many duties about the farm, she was up and down and on the early morning of Aug. 19, 1940, the doctor was called because of a hemorrhage within the left eye. While he was examining her she passed into a deep coma with all the objective evidence of a left hemiplegia.

At 6 P.M. on the same date I examined this patient in consultation and found her very toxic, with a fading jaundice. Her temperature was 105 degrees, respiration 40, pulse 120, and blood pressure 120/70. There was an intra-occular hemorrhage in the left eye. The patient was deeply comatose. There was a complete right sided hemiplegia. Her vascular apparatus was completely negative and we were satisfied that her cerebral hemorrhage was of toxic origin. The liver and spleen were not palpable.

A catheterized specimen of urine showed 2 plus albumin and more casts per microscopic field than the writer had previously observed. Tests for typhoid, undulant fever and lues were negative.

Blood count: erythrocytes 4,600,000; leukocytes 11,800; Hb. 80 per cent; differential: polymorphonuclears 82; lymphocytes 18; sedimentation rate 18 per cent.

A Vandenberg test was not performed. The red blood cells showed marked destruction. The blood film was negative for malarial parasites.

She was hospitalized for symptomatic management and further diagnostic study. Centrifugal urine examination under dark field microscope revealed no spirochaeta.

Her condition grew progressively worse and she died Aug. 24, 1940, at 11 A.M. By exclusion and the clinical picture, a tentative diagnosis of Weil's disease was made.

AUTOPSY FINDINGS

General Description of Body: The body is that of a large, well developed, well nourished, young adult white female. The skin of some portions of the body has a yellowish tinge. There is, however, no definite jaundice at present. A few ecchymoses are seen on the hands and fingers. One is said to have been present in the left eye. The body has been embalmed.

Thoracic Cavity: The pleural cavities show no increase in fluid and no adhesions. The heart is normal in size and location. The pericardial fluid is normal in amount.

Abdominal Cavity: There is no increase in

Submitted November 4, 1940.

fluid. Adhesions are not seen. The tissues are normal in color.

Organs of Thorax: Lungs: The surfaces are smooth, and only faintly anthracotic. The cut surfaces show moderate diffuse congestion and edema.

Heart: The heart is normal in size, shape, and external appearance. Its chambers, valve rings, and walls are of normal dimensions. The endocardium is smooth. The valves are normal, except for a small flat plaque of fibrin measuring about 5 mms. in diameter, which is attached to the auricular surface of the posterior cusp of the mitral valve. The valve shows no roughening, ulceration or other alteration. The plaque is pink, soft, and attached at only one end. Its appearance is not characteristic of any of the usual type of vegetation. The coronary arteries and aorta are normal.

Organs of Abdomen: Spleen: The spleen is about three times normal size, and weighs approximately 500 gms. The surface is smooth and dark. The cut surfaces are of a uniform, moist, glistening reddish appearance. There are no infarcts.

Adrenals: Normal.

Kidneys: The kidneys are moderately enlarged and are firm. The cortex is increased in thickness measuring about 1 cm. It is pale and opaque. The medulla is dark. The pelves and ureters are normal. The capsules are nonadherent. Multiple punctate hemorrhages and infarcts of varying sizes are seen on the surface.

Pelvic Organs: These are normal in general appearance and are not disturbed.

Liver: The liver is normal in size and location. Its surface is smooth and its margins are sharp. It is extremely soft, friable, and crumbly. The cut surface is pale and mottled. The gallbladder and bile ducts are normal.

Pancreas: Normal.

Gastro-intestinal Tract: The only abnormality noted is the presence of some hemorrhagic areas in the muscles of the small bowel.

Head: The scalp and calvarium are normal. The dura mater is adherent to the calvarium. The brain is slightly swollen and quite dry. Petechiae are seen in the meninges of the left hemisphere and the right lobe of the cerebellum. On section multiple punctate hemorrhages and areas of softening are seen in the cortex of the left frontal, occipital, parietal lobes. These are most abundant in the precentral and motor cortex. Similar changes are seen in the right lobe of the cerebellum. The brain is otherwise normal.

ANATOMICAL DIAGNOSIS: Severe parenchymatous degeneration of liver accompanied by nephritis, splenomegaly, and hemorrhages suggestive of Weil's disease.

MICROSCOPIC EXAMINATION

Lungs: Pulmonary alveoli are mostly empty, although some contain a moderate amount of blood serum.

Heart: Myocardial fibers are approximately normal in size. Epicardium myocardium and endocardium appear to be normal. The coronary arteries are normal. A section of mitral valve discloses necrosis and infiltration of leukocytes, most of which are polys. These changes are found diffusely throughout the substance of the valve beyond the point of attachment of the chorda tendineae. There is no vegetation.

Spleen: Trabeculae appear to be rather widely separated. The pulp has a bloodless, edematous appearance. It contains a great deal of blood pigment. It is not particularly increased in cellularity.

Kidneys: Glomeruli and blood vessels appear to be mostly normal. Convoluted tubules are somewhat dilated, because of partial desquamation of lining epithelium. One section of kidney presents a wedge shaped cortical area of necrosis and hemorrhage. At the base of the infarcted area is found an artery whose wall shows intense inflammatory change. The lumen is plugged by a thrombus, which has apparently arisen locally because of local vascular disease.

Liver: The liver in general is poor staining and pale. The liver cells have rather prominent cell margins. They are pale, granular and swollen. The liver shows no inflammatory change and no localized degenerative changes.

Pancreas: Normal.

Brain: Sections of cerebral cortex disclose a superficial zone of necrosis and cellular infiltration involving only the outer lines of the cortex. Over some of these areas the meninges are infiltrated with leukocytes, many of which are polys. In other areas the subarachnoid space contains considerable blood clot. The distribution and appearance of the cortical lesions suggest that they are due to diseases of superficial cortical vessels. Some of these show thrombosis. A section of cerebellum presents similar change in one localized area.

Pituitary: The gland is large. It shows no particular abnormality.

Guinea Pig: The guinea pig inoculated with urinary sediment on the day that the patient died, expired some several weeks later. At the time of the autopsy the pig appeared to be jaundiced. Gross hemorrhage was seen in the lungs. Sections prepared from this guinea pig disclosed multiple large areas of hemorrhage throughout lung tissue. The spleen appears to be congested and to contain an excessive blood pigment. The tubules of the kidney show swelling and paling of lining epithelium. The most severe changes are found in the liver. Liver cells show diffuse, multiple, fine vacuolization apparently from fatty degeneration. The liver in general is hyperemic. Some blood vessel walls show a peculiar type of thickening and hyalinization.

Special Stains: Smears prepared from kidney, spleen and liver at the time of autopsy and stained for spirochetes by several methods including the Fontana silver stain show rather infrequent, but reasonably typical spirochetes of the type Leptospira-icterohemorrhagicae.

CONCLUSIONS

A case of Weil's disease is presented. Autopsy report identified with reasonable certainty the Leptospira-icterohemorrhagicae in special stained specimens obtained from kidney, spleen, and liver.

206 East State St.

Every tuberculin reactor has tuberculous lesions in his body; whether they are microscopic in size or have become extensive cannot be determined by the test. The fact that complete examination of many persons fails to detect the location of the lesions does not discredit the tuberculin reactions.—J. A. Myers, M.D., Amer. Rev. of Tuber., Feb., 1941.

Tracheitis Due To Bacillus Hemophilus Influenzae

CLARA RAVEN, M.D.

ALTHOUGH involvement of the lungs and pulmonary tree are well known complications during influenza epidemics, non-epidemic forms of primary tracheitis, bronchitis or broncheolitis caused by hemophilus influenzae are not often recognized in the course of medical practice. Mulder, from the Netherlands, in a recent review of the literature, found that prior to 1933 although there was frequent mention made of the presence of hemophilus influenzae in bronchiectasis or in chronic purulent bronchitis (called chronic influenzae by R. Pfeiffer), this organism was assumed to be an invader and but little mention was made as to the possibility that hemophilus influenzae may have been a causative agent particularly in the purulent sputum of "primary" acute bronchitis. Mulder himself collected a series of cases during the period from 1928 to 1939: He found that H. influenzae was the predominating organism in 75 per cent of the cases (25 examined) of acute purulent broncho-bronchiolitis; 49 per cent of the cases (120 examined) of acute purulent bronchitis; 36 per cent of the cases (78 examined) of acute purulent tracheitis; and 60 per cent of the cases (59 examined) of chronic purulent (non-foetid) bronchitis.

It is most probable that the experience in Holland may be repeated in this country. This is exemplified by the following clinical history.

CASE REPORT

A young woman bacteriologist on or about April 10, 1940 developed an intermittent nasal catarrh accompanied by malaise and fatigue. Nose and throat cultures taken the third day after onset showed nothing unusual excepting several colonies of hemophilus parainfluenzae which were not deemed significant. On April 17, the patient decided to remain in bed. Through the night she developed chills, felt feverish, coughed and experienced pain and tenderness over the sternum. The temperature taken in the morning was 102.5 degrees F. This temperature persisted through the day and descended to 99.5 degrees F. toward the evening. During the night of April 18 the cough became most annoying, hard, dry, spasmodic, unproductive of sputum, accompanied by a feeling of strangling, moderate hoarseness without sore throat; the pain and tenderness along the sternum was increased by coughing. There was no other pain or discomfort over the chest felt. The usual medication did not relieve the cough. On April 19 the temperature fell to 98 degrees F., the irritating cough and sternal pain continued, but was now accompanied by an occasional expectoration of small, tenacious, grey to greyish black plugs of sputum. Individual plugs of sputum on culture yielded an almost pure culture of hemophilus influenzae. On physical examination at this time there was found only moderate injection of the fauces, some nasal congestion with evidence of right ethmoid sinus involvement; there were a few transient rales below both scapulae. Topical applications relieved the nasal congestion; but the cough and sternal pain continued unabated. The patient was hospitalized on April 25 and further studies made. X-rays of the chest were essentially negative; X-rays of the sinuses showed moderate ethmoiditis. The blood picture showed 70 per cent Hb; 3,500,000 r.b.c.; 9,500 w.b.c.; 58 per cent p.m.l., 36 per cent lym., 3 per cent eos., 3 per cent mono. The urine was negative. Cultures of the nose and throat and sputum were again taken April 29 and now showed only occasional hemophilus influenzae bacilli. The patient gradually improved and was discharged May 3.

The Author

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DISCUSSION

Since the case presented here was not part of the seasonal incidence of influenzae, evidently not contagious, and non-epidemic in origin, it was diagnosed as primary hemophilus influenzae tracheitis. No doubt, similar clinical pictures are often met with in the course of medical practice. The clinical course is protracted and more or less self-limited. Seldom hospitalized, when uncomplicated, these cases are usually dismissed as common ordinary colds, grippe, or just "flu". With the exception of the non-foetid types which are examined for evidence of tubercle bacilli, common purulent bronchitis rarely comes to bacteriologic study. From the actual clinical course it is evident that it would not be justifiable to group primary acute bronchitis with the virus forms of influenza. Sufficient evidence has not yet been collected, but it seems very likely that there are a great number of cases due to hemophilus influenzae bacilli and unassociated with the virus.

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Submitted December 21, 1940.

Acknowledgments: Appreciation is expressed to Emily L. Van Loon, Professor of Oto-Laryngology and Isabel M. Balph, Assistant Professor of Medicine, Woman's Medical College of Pennsylvania, Philadelphia, for clinical consultation.

Use of an Emulsified Extract in the Treatment of Ragweed Pollinosis

A Preliminary Report*

McKINLEY LONDON, M.D., AND EDWARD D. DAVY, B.Sc.

THE most effective method of treating pollinosis involves the subcutaneous injection of a rapidly absorbed aqueous or glycerine pollen extract. The circulation is thereby quickly overwhelmed with active pollen substance which may exceed the patient's tolerance and result in a constitutional reaction. Around the constitutional reaction centers the dangers and difficulties of treatment. To keep reactions to a minimum, successive increments in dosage are comparatively small; fifteen or more injections are required for hyposensitization, and two to three months in time are consumed. Even with this program, under expert guidance, constitutional reactions occur.

From time to time various recommendations have been made aiming at slowing the absorption time of pollen extract. In 1930 Insley[1] recommended that a blood pressure cuff be placed above the site of injection and pressure be maintained and released at short intervals for a period of 30 minutes. Duke[2] added epinephrin to ragweed extract to slow absorption, and quoted Thomas, Koessler and Baleyat as given to the same practice. He also recommended the addition of normal saline to any given dose to be injected thereby increasing the volume and delaying the absorption of the total active principle. Bernstein, et al.[3] showed that increasing the dilution of any quantity of extract would increase the absorption time of active principle. Zoss, Koch and Hirose[4] used alum precipitated extract in the hope that by delaying absorption time constitutional reactions would be minimized.

In 1935 Walsh and Frazer[5] were able to produce a fine emulsion of diphtheria and tetanus toxin which, when injected subcutaneously into rabbits in many times the lethal dose proved non-toxic. In 1938 Keeney[6] demonstrated that the solution of crystaline epinephrin in peanut oil would retard the rate of absorption permitting the intramuscular injection of larger dosage with prolongation of the epinephrin effect. Naterman[7] reported the use of a pollen extract emulsified with lanolin and olive oil in the treatment of hay fever. However the dosage was the same as used with aqueous extract. These experiments encourage the use of pollen extract in an oily solution or emulsion whereby absorption would be more gradual. It would follow that with delayed absorption, larger doses could be given and this in turn would mean that fewer injections would be required to attain a desired maximum dose.

The Authors

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Such an emulsion was made according to the following directions.

Make a 4 per cent ragweed pollen extract, using 5 per cent dextrose solution.[8] Cool this extract to approximately 20° C. and introduce a slight excess of recently slaked lime, shaking the mixture to assure saturation. Filter the solution, This is readily accomplished by filtering through sintered glass covered with ashless filter paper. Cut to fit closely around the edge of the funnel, applying suction to speed filtration. To the filtrate representing the pollen extract add phenol with the resulting concentration of 0.5 per cent of the latter. To a like amount of olive oil add phenol and oleic acid with the resulting concentration of 0.5 and 1 per cent respectively. The addition of oleic acid hastens the emulsion over that produced by the glycerides of the fatty acids represented in the oil. Put the olive oil phenol mixture in a suitable container for making an emulsion by agitation. Next add the extract containing CaOH in portions, agitating vigorously between each addition to make a proper emulsion. In event a slight separation occurs upon standing, agitate vigorously to re-emulsify. The container should not be filled beyond 75 per cent of capacity in order to allow for proper agitation. Allow 48 to 72 hours for sterilization of the emulsion in the presence of phenol. Check for sterility.

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CLINICAL

Twenty patients who had an unquestioned history of ragweed pollinosis and positive scratch tests to ragweed extract were chosen for this study. Over half had had a few injections with aqueous ragweed extract but were changed over to the ragweed emulsion. No case was taken where the dose with the aqueous extract had reached a point which we thought could materially contribute to relief from pollen symptoms. Intradermal tests were made with the aqueous extract of a 1-10,000 dilution and compared to a similar and a 1-2,000 dilution of the ragweed emulsion. This was done to keep us on the alert for the unusually hypersensitive, as well as give us a general idea as to the relative immediate activity of the two extracts.

TECHNIQUE

The emulsions were kept in six ounce rubber capped bottles containing 100, 500, 1,500, 5,000, 10,000, 15,000 and 20,000 units per cc. These were the doses we had roughly anticipated for successive injections and each dose thus would be contained in one or more cc. and could be drawn from one bottle. Each bottle was shaken vigorously at the beginning of the day to ensure a homogeneous emulsion. Due to the viscosity of the emulsion, an 18-gauge needle was used to draw it into a syringe but was replaced with a 22-gauge needle before injecting deep intramuscularly. The plunger was retracted before actual injection to detect blood, in order to avoid injection directly into the blood stream. Only the upper left arms were used for injection, as it was thought a local immunity might be induced, thereby producing less local reaction. Experimental evidence, gained by indirect passive transfer, led us to believe that the emulsified extract would permit tremendous increase in dosage. Our tentative schedule of weekly injections was as follows:

100	Noon	Units	15000	Noon	Units
500	"	"	20000	"	"
1500	"	"	30000	"	"
5000	"	"	45000	"	"
10000	"	"	60000	"	"

For the most part this schedule was adhered to. In a few instances very large local or general reactions forced us to deviate from the schedule. Dosage was dropped to one-half with the onset of the pollen season. No allowance was made for age, weight or degree of skin reactivity as expressed by the intradermal reaction.

RESULTS

It is very difficult to record results with any degree of accuracy; and yet a good idea as to our results may be obtained by classifying our patients in the following categories:

1. **No symptoms**—Four patients.
2. **Very mild symptoms.** Absence of symptoms except for short scattered episodes on a few occasions during the entire season—six patients.
3. **Mild symptoms.** Symptoms for one-half to one hour once or twice a day for at least two or three weeks—five patients.
4. **Moderate symptoms.** Occasional bad days with mild symptoms for one to two hours for three to four weeks—three patients.
5. **Moderately severe symptoms.** Almost constant though moderate symptoms for three to four weeks during the height of the season with mild symptoms for two weeks; severe symptoms for four to eight days—two patients.
6. **Severe symptoms.** Symptoms more severe than the previous classification.

We may say categorically that no patient failed to obtain considerable relief over a non-treated year. Even one patient with moderately severe symptoms, who we feel was inadequately treated due to lack of time, claims she was 90 per cent improved over the previous year. The other case who had moderately severe symptoms, claims 50 per cent improvement. We are mindful of the fact that the year, 1940, in the Cleveland area was not as severe for ragweed sufferers as for the past several years. According to pollen counts made by Dr. Myron A. Weitz,[9] the pollen fall for 1940 was about 60 per cent of that for 1939. Nevertheless, a comparison of results in the group treated with the emulsion extract would compare favorably with a group of over one hundred patients treated in the regular manner with aqueous extract.

UNTOWARD REACTIONS

The injections were not immediately painful, but within a few hours a dull ache developed which lasted from six to twenty-four hours. Considerable swelling did not develop until a level of 15,000 units was attained. Those patients who received 40,000 to 60,000 units complained of swelling of the entire arm to the wrist precluding bending at the elbows. R. P., seen three days after injection of 60,000 units, had an arm twice the circumference of the untreated arm. Two patients absented themselves on a scheduled date because their arms were still swollen. In several cases, a considerable swelling from the previous injection caused us to pass the scheduled injection until the following week. In two instances, a sterile inflammatory reaction the size of a small tangerine developed. On incision, unabsorbed oil escaped. E. C. had irritative reactions at levels of 3,000 and 10,000 units. These could hardly be dignified by the term constitutional reaction as we commonly use that term. The first consisted of a few hives on the arm opposite to that injected, with lachrymation and nasal congestion lasting one-half hour and appearing 20 minutes after injection. No epinephrin was given. The second consisted of a mild, dry cough lasting 15 minutes beginning 15 minutes after injection. No epinephrin was given.

DISCUSSION

It has long been recognized that rapidity of absorption of extract was a major contributing factor in the production of constitutional reactions. Intravenous injection of antigen had to be abandoned for this reason. Our experience with a slowly absorbing ragweed preparation confirms this impression. In spite of increases in dosage which, with aqueous extract, would certainly give rise to constitutional reactions in most instances, only two mildly irritative reactions were produced in one patient. The incidence of constitutional reactions with ragweed emulsion appears to be insignificant. This may prove to be valuable in the treatment of the ultra-sensitive where little latitude in raising dosage is permitted. It may enable us to treat those who have avoided treatment because of repeated constitutional reactions.

Many questions arise which we are not prepared to answer. Does emulsification of ragweed extract diminish its potency? We know that the emulsion is potent because of the positive skin reactions, the considerable local reactions and the two irritative reactions in one patient. Does ragweed emulsion with a prolonged sojourn in the system but reaching a lesser peak in circulation, enhance or detract from its efficacy in promoting protection? What percentage of the emulsion is bound by the tissues locally, and does this absorption nullify its effects with regard to constitutional hyposensitization? If a constitutional reaction were produced, will it be prolonged requiring repeated injections of epinephrin?

This report is based on a comparatively few cases; yet we think we have enough evidence to justify the following assumptions:

Ragweed emulsion is active;

It may be administered at a tremendously increased rate;

Is safer with regard to constitutional reactions;

Will require fewer injections;

Will require less time;

Is effective in the treatment of ragweed pollinosis.

We also feel that a clinical study on a much larger group of patients in a more representative year should be done to discover the full possibilities of this method.

CONCLUSIONS

1. The preparation of an emulsion of ragweed extract is described.

2. Twenty ragweed patients received a total of one hundred sixty-eight injections of one or more cc. of this preparation at weekly intervals.

3. Slow absorption of the emulsified ragweed extract permits tremendous increase in dosage.

4. Clinical results in the group treated with ragweed emulsion compared favorably with results in the group treated with aqueous extract.

5. The apparent advantages from the use of this preparation of increased safety, a material reduction in the number of injections and a reduction of time required for hyposensitization make further studies this coming season desirable.

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Carcinoma of the Colon

As an adjunct to the handling of the problem of distention from a partial to a complete large bowel obstruction, we have recently seen decompression accomplished by means of the balloon tip intestinal tube, the tip of which is passed into the lower ileum and serves as an efficient enterostomy. During the past three years, on the surgical service of Detroit Receiving Hospital, this tube has been passed on over 150 cases of organic bowel obstruction. The closer the growth to the cecum the more rapidly and completely will this tube empty the intestine. The tip of the tube is allowed to remain in the lower ileum during and following operation, so that the bowel remains decompressed during the period when healing is taking place.—John B. Hartzell, M.D., Detroit; Jour. Mich. S. M. S., April, 1941.

Use of Intravenous Evipal In Minor Gynecological Operations

E. E. PINNELL, M.D.

SINCE 1938 intravenous evipal has been used when possible on the gynecological service as a routine anesthetic for minor operations. There are certain well established contra-indications to the use of this drug which have been well outlined.[1] This paper has to do with factors bearing on relaxation of the patient, especially the effect of pre-anesthetic medication, and the incidence of certain reactions occurring during and after its use.

In the literature many conflicting views concerning the effect and indications for pre-medication are found. Some authors[2] believe that the anesthetic effect is better with pre-medication, others[3] that atropine arouses the patient, and still others[4] believe that all pre-medication is contra-indicated because of the added depressant action it has on the respiratory center. The only pre-medication employed in any of these patients was morphine sulphate gr. 1/6 and atropine sulphate gr. 1/150 injected hypodermically thirty minutes prior to operation. Forty-three per cent had no pre-anesthetic drugs.

The following method of giving evipal is used in this clinic. Under sterile technique a 1.0 gm. vial of powdered evipal is dissolved in 10 cc. of distilled water. A suitable vein in the cubital region is selected and the needle inserted. Two cc. of the solution is injected at once and after one minute if the respirations and pulse are satisfactory 1 cc. of the solution is injected every fifteen seconds. A close watch is kept on the respirations and pulse during the period of injection. Thus three minutes are required from the insertion of the needle until the entire amount has been given. Occasionally because of age, weight and general condition the full amount is not required or given. This short period of administration affords the operator or his assistant, who gives the evipal, ample time to perform most minor gynecological procedures. A competent anesthetist is always present to check the respirations, blood pressure, the time of administration, to support the chin so the air passages will remain clear, to administer supplementary nitrous oxide if the relaxation is not adequate, and carbon dioxide and oxygen if resuscitation is necessary. An ampoule of coramine or metrazol is kept available for use if the respirations become too depressed. These drugs have seldom been used.

The Author

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From the beginning of its use, various degrees of relaxation have been obtained with evipal. One hundred and twenty-one consecutive cases from the gynecological service were analyzed in detail in an effort to correlate the degree of relaxation with age, weight, the time required for the operation, race, pre-operative apprehension, and finally the pre-medication. Although these operations were minor gynecological procedures good relaxation of the abdominal muscles was necessary for satisfactory bimanual examination.

It was found that 41 cases or 33 per cent showed fair to poor relaxation, requiring supplementary anesthesia in 30 cases or 25 per cent. In a review since February, 1936, of an additional 1707 cases, 389 or 23 per cent received supplementary anesthesia. In correlating the relaxation obtained with the above mentioned factors the following observations were made. Most of the patients over 40 years of age were well relaxed. The majority of patients requiring supplementary anesthesia weighed over 60 kg. Most cases with operations lasting more than 30 minutes required supplementary anesthesia. Only 27 per cent of the total patients were colored, but of the 30 patients who received supplementary anesthesia 12, or 40 per cent were colored, seven having pre-medication. Thirty patients or 25 per cent of the total number were apprehensive, 17 of these were poorly relaxed, with 12 requiring supplementary anesthesia. Apprehension is apparently a big factor in poor relaxation and occurs more often in the colored race.

A 33-year-old white female, with chronic alcoholism who had a psychosis following childbirth eleven years previously received 10 cc. of evipal intravenously. The evipal completely failed to anesthetize the patient so nitrous oxide, oxygen and ether were given to put her to sleep. Another patient who had also had a psychosis and was perhaps sensitive to barbiturates was

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Submitted October 30, 1940.

From the Department of Obstetrics and Gynecology, Maternity Hospital and Western Reserve University.

very excitable and semi-delirious for some hours after administration of the drug.

Sixty-nine patients or 57 per cent of the total number received pre-medication of morphine and atropine. Eighteen of these required supplementary anesthesia. This is 60 per cent of the 30 patients requiring inhalation anesthesia, therefore it would seem there are factors of psychic or physical nature which have more to do with the relaxation of the patient than ordinary pre-anesthetic medication. In these patients studied pre-medication seemed to have no definite correlation or effect.

Other factors studied in connection with pre-medication and the results were as follows: Sixty-nine cases received pre-medication and the average change in respirations was plus 2.7 as against plus 2.0 in the remainder of the cases. Respirations were seriously altered in two patients. One a 19-year-old white woman during the injection had generalized convulsive movements, the respirations stopped a few seconds, then soared from 36 to 64 per minute, but post-operatively returned to normal. The second patient a 63-year-old colored woman produced considerable mucous with resulting partial obstruction and the respirations soared from 20 to 50. However the condition was immediately relieved by insertion of nasal tubes. Correspondingly the average time for loss of consciousness was 23 seconds with premedication as against 22 seconds, without premedication. No definite correlation could be made between the time of loss of consciousness and race, age or weight of the patient.

In this study the changes in pulse and blood pressure are consistent with other reports. The average pulse elevation was 12. The average drop in blood pressure was 15 mm. systolic and 7.5 mm. diastolic. There was a more marked drop in cases with hypertension. In one patient this was as much as 76 mm. systolic and 30 mm. diastolic.

At the time of administration generalized muscular twitchings were noted occasionally. Vomiting occurred only once. There was one case of hiccoughing of two minutes duration occurring five minutes after the injection and the patient became moderately cyanotic but responded quickly to carbon dioxide and oxygen inhalations. Post-operatively, moderately severe headaches were occasionally noted, also nausea and vomiting after the evening meal. It was thought a liquid rather than a soft diet would remedy the nausea but the results were approximately the same.

Since evipal was first used in this clinic there have been no deaths or serious reactions attributed to this drug in over 1800 cases thereby giving a fair indication of its safety. We realize at all times, however, that it is to be regarded as a fixed anesthetic.

It was agreed by all those patients having had a previous form of anesthetic that evipal was easier to take and more pleasant.

CONCLUSION

A method of the administration of intravenous evipal is outlined.

One hundred and twenty-one consecutive minor gynecological cases are reported, studying the degree of relaxation, the effect of pre-medication, and reactions occurring during and after the injection of intravenous evipal. Relaxation was found to be correlated with age, weight, race, the time required for the operation, and the pre-operative apprehension of the individual patient. Pre-medication of morphine sulphate gr. 1/6 and atropine sulphate gr. 1/150 was found to have no definite effect on the relaxation, the change in respiratory rate, or the time required to produce loss of consciousness in the patient. There were several non-serious side-reactions noted but no deaths in over 1800 cases. It was generally agreed by patients to be a pleasant type of anesthesia.

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Diagnosis of Non-Tuberculous Lesions

One place where the roentgenogram is indispensible is in the diagnosis of non-tuberculous lesions of the lungs; in a large percentage of cases the roentgenologist can recognize the abnormality or pathology and in most others can contribute facts which, when coupled with the history and laboratory data, will lead to an accurate diagnosis. Chronic pulmonary lesions are very serious; directly or indirectly they produce a high mortality rate and should be suspected in any patient with pulmonary symptoms. Conditions which present the greatest diagnostic problems are: passive congestion; chronic pneumonitis; chronic bronchitis; bronchiectasis; lymphoblastoma; pneumoconiosis; abscess; cystic disease of the lung and pneumocele; pneumocycosis; infiltrative carcinoma, and bronchogenic carcinoma. The physician should familiarize himself with the salient diagnostic features of each as they appear on the roentgenogram. He must not, however, lose sight of the fact that a chest roentgenogram without an accurate history of the case is valueless.—J. E. Lofstrom, M.D., and F. C. Jewell, M.D., Detroit; Jour. Mich. S. M. S., April, 1941.

Intra-Orbital Tumor of the Optic Nerve

Report of a Case

GEORGE W. STIMSON, M.D.

PRIMARY tumor of the optic nerve is rare. To date there have been less than 350 cases recorded of primary tumors of the optic nerve and chiasm. They have been divided into two main groups: intraneural, which are represented by the gliomas, and tumors of the nerve sheath, represented by meningiomas or endotheliomas and fibromas. Gliomas are about four times as frequent as the others, meningioma having occurred in 17 per cent of reported cases, 20 in females and 7 in males. While gliomas are apt to occur early in life, more than half of the cases of meningiomas came after the age of 30.

These tumors are slow of growth (from two months to 50 years); they do not metastasize; are relatively benign, and recurrence is the exception. While it is difficult to prove the intraorbital origin of meningioma, there is no reason such may not be the case for the meningeal optic nerve sheath is merely an extension of the meninges about the brain.

It is on account of its extreme rarety that our case is reported.

DIAGNOSIS

Painless, progressive proptosis with gradually increasing monocular loss of vision are the most characteristic symptoms. In tumors of the sheath proptosis usually precedes loss of vision, while in the intraneural tumors the reverse is true. There may or may not be limitation of motion, but it is more apt to occur in nerve sheath tumors than in the intraneural ones; and the globe is usually displaced straight forwards. The commonest abnormality found on ophthalmoscopic examination is secondary optic atrophy (in more than 50 per cent of cases); the rest show papilledema. A normal fundus is rare.

PROGNOSIS

Prognosis is good, if the tumor can be removed, but it must be guarded on account of the possibility of intra-cranial involvement, for there might always be a doubt of a sheath meningioma being an isolated process; it might be part of a larger, undisclosed tumor. Meningiomas have recurred in 15 per cent of cases.

REPORT OF CASE

W.R.R., single, white male, American, aged 43 years.

Past and family history: Irrelevant except that he stated that he never had any venereal infections, and that his father died of "cancer of the arm after repeated amputations."

The Author

● Dr. Stimson, Warren, Ohio, is a graduate of University of Pennsylvania, School of Medicine, 1903; fellow American Academy of Ophthalmology and Oto-Laryngology; fellow American College of Surgeons; staff ophthalmologist, rhinologist and oto-laryngologist, Warren City Hospital.

Present illness: About 3½ years ago he first noticed that his right eye was beginning to bulge, and this had gradually and progressively increased until the present time. Vision in this eye had gradually failed, but he said it had always been poor in both eyes, and he had always had to wear strong lenses over both eyes. There had never been any pain, and he had not lost any weight.

Examination: The patient was first seen Jan. 19, 1940. General physical examination was negative. He was well nourished and weighed 153 pounds, which he said had been his weight for years.

Left eye: Vision uncorrected 20/200; with $+7.00 = +2.00 \times 90$ correction it was 20/70. Otherwise this eye was negative.

Right eye: 20/200 minus, and corrective lens failed to improve. There was great proptosis amounting to 15 mm. forward and slightly downward. There was marked edema of the lids and conjunctiva both palpebral and bulbar, but the lids could still close. The cornea was normal. The pupil was the same size as the left, but it reacted to light quite sluggishly. Ocular muscle movements were normal except for some interference with abduction. The eyeball transilluminated clearly from all sides. Palpation was unrevealing; no tumor could be felt. The globe could not be pushed back into the orbit. There was no tenderness, no pulsation, no bruit. Ophthalmoscopic examination, which required a +7.00 lens, showed media clear, vertical elliptical disc, and optic atrophy.

Rhino-pharyngo-otological: There were no symptoms attributable to ears, nose and throat. Rhinoscopy negative except moderate deviation of septum to the right. To transillumination the left frontal sinus was dark (anatomical), the right frontal clear, and normal in size; the maxillary sinuses were both clear and identical. Ears negative.

X-ray: Films of the entire head showed an absent or undeveloped left frontal sinus. The optic foramina were normal and equal in size. The external wall of the right orbit gave a

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Read before the Cleveland Ophthalmological Club Dec. 10, 1940.

denser shadow than the corresponding portion of the left orbit. Aside from this there was nothing more than could be learned from the films.

Serologic: Blood gave a negative Kline and a negative Kahn reaction.

Neurological: Entirely negative.

Provisional clinical diagnosis: Tumor of the orbit.

TREATMENT

On account of the optic atrophy and almost total loss of vision, it was decided to enucleate the eyeball and investigate the orbit. This was done under ether anesthesia Jan. 25, 1940. After the globe was removed inspection was unrevealing, but palpation disclosed what was thought to be an osteoma of the external orbital wall corresponding in site to the shadow shown on the X-ray film, and rather a thick layer of what seemed to be orbital fat. It was felt that removal of the osteoma at this time would serve no good purpose, and that if it were a benign growth, the wound should heal satisfactorily and enough room be left to accommodate an artificial eye. The muscle layer and the conjunctiva were each closed with a cat-gut suture. The globe was sent to the Army Medical Museum, Washington, D. C., who reported on Feb. 6, 1940, that gross examination revealed no evidence of new growth.

PATHOLOGY

Army Medical Museum's report on April 30, 1940: Gross: Slightly shrunken, firm eye measuring 22x25x24 mm. The cornea is clear. The eye is opened in the horizontal plane. There is no evidence of intra-ocular new growth. The eye appears to be comparatively normal grossly except for a small swelling in the macular region. Microscopic: On one side the iris shows beginning peripheral anterior synechia and slight ectropion. There are cystic degeneration of the retina at the ora serrata and edema of the outer plexiform layer. The detachment is probably artefact as there is no subretinal exudate. There is focal mononuclear cell infiltration in the choroid and the posterior vessels are engorged. The central vessels in the nerve are engorged and there appears to be slight papilledema as well as slight depression of the lamina cribrosa and some atrophy of the optic nerve. Diagnosis: Optic atrophy and papilledema (resulting from orbital tumor); uveitis, chronic; anterior synechia; glaucoma, secondary.

Following this operation great edema of the orbital contents developed and it progressed to such a degree that the conjunctiva protruded between the lids almost as far as the proptosed eye before its removal. After waiting a reasonable length of time to see if there would be any abatement of the edema, which failed to occur, it was felt that there was something more than the osteoma in the orbit, and that it must be a tumor of the soft parts that was causing the persistent edema and proptosis of the orbital contents. It was therefore decided to reoperate and if deemed advisable do an exenteration of the orbit.

The second operation was performed under ether anesthesia on March 8, 1940. The conjunctiva was incised and carefully dissected free from the underlying tissue and reflected in order to preserve it in its entirety, with the thought that it might later permit the wearing of a prosthesis. Immediately there came into view a semi-soft, reddish brown mass which completely filled the orbit, and a few specks of black pigment were seen floating in the wound. Biopsy was immediately done and the report quickly came back from the laboratory that the specimen was suspicious of melano-sarcoma. The orbit was then entirely exenterated. The tumor mass which filled the orbit extended back to the optic foramen and it was completely removed. The osteoma was then chiseled away flush with the orbital wall and the orbit packed with vaseline gauze. A portion of the tumor was sent to the Army Medical Museum.

Pathology: Report of the Army Medical Museum dated March 27, 1940, was as follows: The tumor is made up of small whorls of epithelioid cells having relatively small vesicular nuclei and abundant, rather homogenous cytoplasm. These groups are imbedded in and separated by rather dense fibrous stroma. The cells are quite uniform in size and shape, where not distorted by pressure. Mitoses are infrequent. There is a tendency in some of the whorls to hyalinization. Other blocks from the specimen show orbital tissue free of tumor but with dilated vessels and some chronic inflammatory reaction, and others show the ocular muscles in varying stages of degeneration. Diagnosis: Meningioma.

Following this operation the patient's convalescence was uncomplicated and uninterrupted. The wound was extremely clean from the beginning and the orbit filled up with healthy granulation tissue. On April 11, 1940, by which time his weight had risen from 153 to 158 pounds, he was discharged and departed for his home in another state. When last heard of over seven months later he was well and working, and we were informed by a friend who had seen him that he was wearing a prosthesis.

Mineral Elements

My subject resolves itself into a balanced diet of the essentials for normal health. In all probability we have far to go before we know what all these essentials are, yet we know enough to enable us to say that there is a direct relationship between the soil and health as has been observed for many years. Physicians have recognized for a long time that there was a direct relation between the incidence of goiter and the lack of iodine in the water supplies of certain regions where the rocks are of sedimentary origin. A former geologist of this state has been quoted as author of the statement that "the university never matriculated a student who lived on the Pottsville sandstone."—C. R. Orton, Ph.D., Morgantown; W. Va. Med. Jour., Vol. 37, No. 4, April, 1941.

Curability of Cancer of the Stomach

WILLIAM B. MORRISON, M. D.

CARCINOMA of the stomach accounts for approximately one-third of the total deaths due to carcinoma in the United States. It presents the highest death rate and the lowest percentage of five-year cures of any type of malignant disease treated by surgical means. However, surgery alone offers a hope of cure.

I have analyzed the factors concerned with the end-results in carcinoma of the stomach as it has been observed in the Columbus Cancer Clinic and Grant Hospital. This study is based upon the histories of 214 patients during the ten-year period from 1930 to 1940. The greater majority of these carcinomas occurred between the 45th and 65th years, 158 or 73.8 per cent were males and 56 or 26.2 per cent were females.

In this total of 214 cases, 78 or 36.4 per cent were either never offered surgery or were too far advanced to warrant the risk involved in an exploratory laparotomy. Where operation was advised 76 or 35.5 per cent had resections performed, or an attempt at cure made. The progress in the control of cancer of the stomach in the future, depends primarily upon increasing this percentage. In the remaining 60 or 28.1 per cent, palliative operations were performed to prolong life and make the patients more comfortable.

SYMPTOMS

The problem of symptomatology involves the general practitioner and internist to a great, if not greater, extent than the surgeon. Symptoms referable to the stomach are present at some time or other in the majority of patients with cancer of the stomach and there are few organs in the body which the patient feels so well qualified to treat as his own stomach. In this he is encouraged by the vast number of nationally advertised stomach remedies which may give some relief even in malignant disease.

The cases were divided roughly into two groups according to the duration of the symptoms: those who had symptoms one year or more and those who had symptoms six months or less. Unfortunately the larger group seems to have had symptoms for six months or less and only 22 per cent of the survivors were found in this group.

There was no significant difference in the ages of the two groups nor were there any differential symptoms. Thus, rapidly growing cancers of the stomach are rarely cured while cures are comparatively frequent in patients with long histories.

The Author

● Dr. Morrison, Columbus, Ohio, is a graduate of Jefferson Medical College, 1922; fellow American College of Surgeons; surgeon, Grant, White Cross, Mt. Carmel Hospitals.

There was another group of patients that complained of indigestion and dyspepsia for several years and obviously were treated for chronic gastric ulcer for varying periods of time. All gastric ulcers are not malignant or undergo malignant degeneration, but enough gastric carcinomas follow a history of preceding ulcer symptoms to regard all gastric ulcers as potentially malignant.

Epigastric symptoms suggestive of ulcer developing in a patient of middle age should be regarded as of neoplastic origin until the benign character is clearly established. The recognition of these early lesions will certainly increase the percentage of five-year cures. Progressive weakness was the only prodromal sign. The next most common symptom was pain, which varied from a mild epigastric distress to an acute severe pain. The symptoms, in order of frequency, were: Pain, 89 per cent; loss of weight, 86.5 per cent; weakness, 60.5 per cent; cachexia, 41.6 per cent; jaundice, 20.4 per cent; nausea-vomiting, 15.3 per cent; hematemesis, 8.5 per cent.

DIAGNOSIS

The definitely increased percentage of operability from 1935 to 1940 indicates the fact that the diagnosis of carcinoma of the stomach is being made earlier. However, there can be no really early diagnosis of cancer of the stomach until the exact diagnosis of "indigestion" is taken seriously, both by the patient and by his doctor, in persons over 40 years of age.

X-ray: The importance of an X-ray examination cannot be overemphasized. It usually reveals a distorted contour of the stomach. The employment of the spot-film has made differentiation of ulcer and cancer more accurate. The experienced internist, upon the least suspicion, will make repeated fluoroscopic examinations. He knows that a patient who is apparently in good health, but with an unexplained dyspepsia, may have cancer.

The prepyloric region is the most frequent site of cancer. Approximately 75 to 80 per cent of carcinomas start there. No lesion on the greater

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Submitted October 24, 1940.

curvature should be treated by medical measures, for by so doing, one would almost surely miss the opportunity to remove an early cancer.

Gastroscope: The advent of the flexible gastroscope has widened the diagnostic possibilities in gastric carcinoma, especially for lesions in the fundus.

Peritoneoscope: Is of value in determining whether there is a generalized carcinomatosis. Thus, many patients will be spared an exploratory laparotomy, while others may be made available for surgical treatment by excluding the possibility of numerous liver metastases.

Gastric Analysis: Because of its simplicity, a gastric test meal should be carried out as a routine procedure among patients in the so-called cancer period. It is now well known that little dependence can be placed on the presence or absence of free hydrochloric acid in the diagnosis of carcinoma of the stomach. Yet the finding of an achlorhydria and achylia ought to stimulate a suspicious attitude.

PREOPERATIVE PREPARATION

It is obvious that patients with gastric malignancy are cachetic beyond the point of observation. Vitamin deficiencies are frequently observed. In a large percentage of cases there is a lowered serum protein, and if uncorrected, it may contribute to edema of the stoma and a malfunctioning anastomosis. The normal serum protein varies from 6.5 per cent to 9 per cent. Edema occurs when the serum protein falls below 5.5 per cent. A serum protein determination was made preoperatively in 50 consecutive cases of carcinoma of the stomach. The following table summarizes the distribution of these cases:

Cases	Per cent	
5	6.5-9	Normal
14	5.5-6.5	No edema
19	4.5-5.5	Edema subcutaneous
9	3.5-4.5	Edema subcutaneous—lungs
3	2.5-3.5	Marked edema—poor operative risk

1. A serum protein test should be routine in every case of obstructive disease of the gastrointestinal tract. Transfusions given preoperatively will correct the hypoprotanemia. It is inadvisable to administer excessive amounts of normal saline, preoperatively, to patients with hypoprotanemia as it will undoubtedly increase the free fluid in the serous cavities, also the peripheral edema.

2. A quantitative measure of cevitamic acid has revealed a low vitamin C supply in these patients. This deficiency can be corrected within a few days by the proper administration of this vitamin. Wound healing may be influenced by the lowered cevitamic acid.

3. A Wassermann test should be made routinely. It is of great value in a differential diagnosis, also the presence of syphilis may influence wound healing.

4. Sepsis in the depleted patient increases in frequency as a lethal element as the scope for radical resection widens. Where cultures of the gastric content show betahemolytic streptococci, sulfanilamide may be tried. Frequent lavage with dilute hydrochloric acid may have some value.

5. Continuous suction siphonage by means of the Levine tube is of great value in relieving distention and in the mechanical cleansing of the stomach.

6. Transfusions are given routinely to correct the secondary anemia.

7. Intravenous glucose in distilled water is given in all cases to replenish the glycogen reserve.

ANESTHESIA

Anesthesia is one of the chief factors in the mortality following gastric resections.

Ether is satisfactory from the point of relaxation but it undoubtedly contributes to the high incidence of pneumonia following partial gastrectomy.

Avertin has been used as a basal anesthetic in combination with local novocaine infiltration of the abdominal wall. It has been satisfactory in some cases but frequently the relaxation has not been adequate.

Spinal anesthesia has been used in several cases but it had to be supplemented by nitrous oxide and oxygen. The high toxicity of nupercaine makes it an undesirable agent while pontocaine cannot be relied upon to give an anesthesia of adequate duration.

Local novocaine infiltration of the abdominal wall and peritoneum supplemented by the splanchnic block of Finsterer is an ideal anesthetic. Unfortunately, however, the temperament of most patients is such that gas or ether must be used in addition. The most satisfactory method, in my experience, has been the combination of local novocaine infiltration with nitrous oxide and oxygen.

CHOICE OF OPERATION

The surgical treatment of cancer of the stomach may be classified under two heads.

1. **Gastroenterostomy**, anterior or posterior, resection for exclusion, jejunostomy. These are pallative operations performed in inoperable cases with obstruction of the pylorus.

2. **Partial gastrectomy**, total gastrectomy.

Pallative operations of anterior or posterior gastro-enterostomy have little to recommend them either from the point of view of longevity or comfort to the patient. The patients continue to experience some pain, anorexia, nausea, and frequent eructation of gas and foul liquid and the food is contaminated by contact with the ulcerated infected lesion. The tumor is irritated by the food and products of digestion, resulting in continued bleeding and progressive anemia. The infected cancer may delay the healing of the wound of anastomosis and lead to perforation. The carcinoma, after gastroenterostomy, frequently grows upward to involve and obstruct the stoma, unless a very high anastomosis is done, in which case it is not of great aid in emptying the stomach.

Resection for Exclusion prolongs life, and makes the patient more comfortable. The excluded distal segment of the stomach is put at complete rest which greatly relieves pain and discomfort. The appetite and digestion improve as soon as the proximal gastric mucosa becomes clean and free from infection and the tumor itself becomes smaller, presumably because of the subsidence of infection and surrounding inflammatory reaction. The exclusion of digestive ferments renders the danger of autodigestion and perforation of the cancer less imminent. Hemorrhage is then an infrequent complication and the anemia less fulminating. Exclusion of the tumor prevents its extension to involve the new stoma and occasionally the cardia.

Partial or total gastrectomy offers hope of increased longevity or cure. The majority of cases should be considered as possible candidates for resection if the technical difficulties are not insurmountable.

Radical surgery should be carried out unless massive metastases are present in the liver or recognizable irremovable metastatic growths such as rectal, umbilical, or supraclavicular implants can be demonstrated. Resection is also inadvisable in the presence of ascites. Metastases in the pouch of Douglas or Krukenberg's tumors of the ovary do not contraindicate a palliative resection.

The clinical evaluation of nodes about a gastric cancer is very uncertain. Enlargement does not necessarily mean involvement by cancer and the patient may be cured even if all involved lymph nodes are not removed. The remaining nodes may be inflammatory. Likewise the differentiation of cancer and ulcer at the time of operation may be impossible. Resection should always be done in case of doubt.

TYPE LESION FAVORABLE FOR RESECTION

The type and size of the growth gives no indication whether a resection is advisable or not. Cancer of the body of the stomach, if well demarcated, is the most curable of any because it is accessible and the regional lymph structures can be completely removed. The large freely movable cancer is usually of the colloid type, the lesion is sharply demarcated and the walls of the uninvolved portion of the stomach are flexible and therefore suitable for extensive resection and safe anastomosis.

Lesions of the antrum and those which extend to the pylorus are not the most favorable for removal and cure because the supra and infra pyloric nodes in this region are extensive and become involved early.

A lesion in the fundus is the most unfavorable because early symptoms are few and the lesion is relatively inaccessible. When a high-lying cancer involves the greater curvature and when the growth is palpable and movable, exploration should always be advised.

OPERABILITY

Operative treatment was carried out in 136 or 63.5 per cent of the 214 cases. The details of these operations are set out as follows:

Analysis of 214 Cases	Operations Performed		
Operations	No. of Cases	No. of Deaths	Mortality
Partial Gastrectomy (1930-1935)	28	9	31.1%
Partial Gastrectomy (1935-1940)	46	10	21.7%
Total Gastrectomy	2	1	50 %
Resection for Exclusion	22	8	36.3%
Anterior Gastroenterostomy	7	3	42.8%
Posterior Gastroenterostomy	16	6	37.5%
Jejunostomy	1	----	-----
Exploratory Laparotomy	14	2	14.2%
Inoperable—no surgery advised	78	---	-----

MORTALITY

Of the 136 cases which were subjected to operation, the result was fatal in 39 or 28.6 per cent.

There is a definite mortality from cancer itself. This is shown by the fact that the operative mortality following exploratory laparatomy alone for cancer of the stomach, was 14.2 per cent in this series of cases and approximately 20 per cent of the patients died of cancer while in the hospital for observation and medical care alone.

The operative mortality varies in the five-year periods chosen for comparison. From 1930 to 1935, mortality, following resection, was 32.1 per cent. From 1935 to 1940 the mortality, following resection, was 21.7 per cent. This reduction is due, no doubt, to an earlier diagnosis, more intelligent preoperative preparation, and better postoperative care.

One-third of the operative deaths was due to pneumonia. The incidence of pneumonia has been lessened by the wider use of local anesthesia and postoperative inhalations of carbon dioxide and oxygen. There has been a marked decrease in the number of deaths in the last two years, due to sulfapyridine and sulfathiazole therapy.

Peritonitis accounted for another third of the postoperative deaths. There are obvious reasons for this: the infection present in the growth, the lowered resistance of the patient, the lowered acidity of gastric juice, the extensiveness of the operation, and the poor healing power of the tissues.

These dangerous factors have been lessened by continuous suction siphonage, prophylactic transfusions, careful manipulation of the growth, and ample reinforcement of all suture lines, so that tension is completely overcome.

The remaining deaths were due to miscellaneous complications. Operative shock has practically been eliminated in the last five years due to better preoperative preparation and prophylactic transfusions.

FIVE-YEAR SURVIVALS

Between the years 1930 and 1940, 74 partial gastrectomies and two total gastrectomies were performed for cancer of the stomach. Nine of these patients have lived more than five years.

One patient is living ten years after operation free of disease, one eight years, two six years, four over five years. One died of cancer six years after operation. Both total gastrectomies survived the operation. One patient died of pneumonia on the fourteenth day, the other has been living 26 months.

PATHOLOGY

The least malignant is the carcinoma in situ, formerly called malignant adenoma. The cells of this tumor are definitely malignant, atypical in appearance, and with many mitoses. There is, however, no evidence of any invasion of the muscular or serosal layers. The growth is confined to the mucosa.

All cases of carcinoma in situ who survived operation, lived over five years. Adenocarcinomas are more malignant ranging from the polypoid type to highly invasive. These carcinomas have more or less well-differentiated gland-like structures. The Grade I adenocarcinoma is often polypoid and is practically the same degree of malignancy as carcinoma in situ. Adenocarcinomas of Grade II, III, and IV manifest increasing degrees of malignancy.

The only adenocarcinomas that lived five years after operation were either polypoid or Grade I malignancy. The nine five-year cures included four carcinomas in situ, prepyloric in location, one polypoid carcinoma and four adenocarcinomas Grade I. The prognosis is definitely influenced by the presence or absence of metastases and by the pathologic grading of the tumor.

CONCLUSION

The technic of gastric resection has been perfected and further operative refinements cannot offer hope of lengthening the life span of gastric carcinoma patients or increasing the percentage of five-year cures. Their hope depends upon early diagnosis and adequate surgical treatment when the lesion is pathologically young.

The outlook in gastric carcinoma at the present time is more encouraging as indicated by the great reduction in mortality and the increased percentage of operability during the last five years, also in the fact that the diagnosis of carcinoma of the stomach is being made earlier.

327 E. State St.

Soil in Relation to Health

Since plants are the intermediate products which assimilate most of these elements and prepare them in forms available for animal assimilation we must look to them and their composition from every angle, including the trace or minor elements as well as vitamins. We must recognize that the composition of food plants is dependent upon the elements present in the soil in which such plants were grown. We must recognize therefore, that a bushel of potatoes grown on a mineral deficient soil is not the nutritional equivalent of a bushel of potatoes grown on a soil containing the necessary elements. Quality rather than quantity therefore becomes the criterion for determining the relationship between food and health.

What soils possess the elements necessary to produce food plants containing these mineral qualities essential to man's health? We cannot answer this question with confidence at present. We can say from observation that those people living on our more productive soils have in general the better health index. We do not have today a sufficiently complete analysis of our soils to say which ones will produce the most complete requirements from the standpoint of human food production.

In conclusion I may say that we are gradually pushing back the curtain which has obscured events behind the common scene and as these new scenes unfold we shall recognize a little more clearly each time the importance of fundamental facts. In this health program we shall, as time goes on, recognize more fully the fundamental relation of health to the soil. And through this recognition mankind will be benefited for the reason that he will be brought closer to nature and these things which are most worthwhile in our lives.—C. R. Orton, Ph.D., Morgantown; W. Va. Med. Jour., Vol. 37, No. 4, April, 1941.

The American Academy of Pediatrics is sponsoring an active national campaign to protect infants and children from contact infections from servants. Routine physical examinations including X-ray and blood test, given to all home employees, are advised by the Academy to prevent those too frequent cases of tuberculosis and other infectious diseases traced to a household employee.—Bulletin of Tuber., Institute of Chicago and Cook County, Aug., 1940.

Pulmonary Embolism Following Saphenous Ligation*

Case Record Presenting Clinical Problems

HERBERT S. REICHLE, M.D.

A WHITE male, aged 61, had suffered from varicosities of the lower extremities for several years. Treatment had consisted of a series of sclerosing injections followed by ligation of the right great saphenous vein, whereupon, according to the patient's statement, shortness of breath had set in. Since then, in a period of approximately three weeks, he had suffered from lassitude, continued shortness of breath and epigastric distress. The night before admission to the service of Dr. E. E. Beard he suddenly became very weak and dizzy and his skin, blue and cold.

The patient was seriously ill; he was dyspneic even in semireclining position, anxious and cyanotic. The neck veins were distended when the patient was flat and the extremities cold and moist. Sternal pressure elicited epigastric distress. The heart sounds were feeble and the mechanism that of auricular fibrillation. Moist rales were present at the base of the right lung. The temperature was 38.6 C., the pulse 200, respirations 28, blood pressure 75/50. The urine showed albumin but otherwise was not abnormal. The immediate treatment was directed against the state of shock; however, the patient progressively declined and died two days after admission.

The final clinical diagnosis was: **Generalized arteriosclerosis, arteriosclerotic heart disease with paroxysmal auricular fibrillation, possible coronary thrombosis, recent ligation of right great saphenous vein, possible pulmonary embolism.**

The autopsy disclosed these important features: Massive embolism of the pulmonary artery and its main branches, hypertrophy of the heart (450 grams) with coronary sclerosis and thrombosis, old and recent infarction, pulmonary infarction, and arteriolar nephrosclerosis. The larger recent emboli were coiled and not attached to the pulmonary artery, but older smaller emboli were present associated with pulmonary infarction, a process that requires about 24 hours or more for its development. This means that on several occasions fragments of thrombi were dislodged from the iliac veins and finally the large fatal embolism occurred. The external iliac vein was the seat of thrombosis from its junction with the internal iliac down into the femoral to the point of ligation. Neither grossly nor microscopically was there any inflammation. This may have been unfortunate for the patient because organization of a clot in a vein so that it becomes consolidated and attached to the wall would be favored by inflammation.

The cause of death was undoubtedly the pulmonary embolism. Death from pulmonary embolism may be immediate, delayed for a short time or take place after several hours. It is most unusual for it to occur three days after the embolism. It is probable that pulmonary embolism led to death not from intrathoracic reflex, shock or asphyxia, but from embarrassment of circulation already overburdened by the effects of cardiac disease. It is probable that the illness of three weeks prior to death was due to the heart disease, because the history of lassitude, dyspnea and epigastric distress is such as might be expected in the presence of myocardial damage incident to coronary sclerosis and thrombosis. The hypertrophy of the heart was probably due in large part to hypertension because there was well marked sclerosis of the arterioles of the kidneys. The coronary sclerosis perhaps contributed to the hypertrophy, for we know that in the presence of coronary sclerosis the cardiac hypertrophy of hypertension is somewhat augmented. The blood pressure had dropped at the time of admission. This was evidently due to central disturbance in circulation; there was myocardial scarring the result of old infarction and aneurysm of the left ventricular wall, and fresh infarction due to coronary thrombosis probably of about three or four weeks duration. The embolism of the pulmonary artery reduced the amount of blood flowing into the left ventricle. Thus there was a ventricle reduced as to pumping capacity and with a diminished amount of blood to eject. That the heart was insufficient for a considerable period is indicated by the presence of blood pigment accumulated in lungs, liver, spleen and kidneys, a sure sign of prolonged passive hyperemia.

Congestive failure probably contributed to the fatal outcome in another way, namely in the formation of the ilio-femoral thrombus. It is well known that thrombosis is favored by failure of circulation, with its accompanying peripheral venous stasis and formation of eddies in the byways of the vascular system. Ligation of the saphenous vein would add to the local stagnation up to the next tributary vein, in this case up to the junction with the internal iliac. Perhaps if cardiac insufficiency had not been present, the stagnation would not have been so great as to cause the building up of massive loosely attached thrombus, which might be readily dislodged as an embolus.

It is possible that if the cardiac disease had not existed, the operation would have given no trouble. Although final conclusions cannot be drawn from a single case, the lesson suggested by this case is that an operation of this sort should be performed only after a careful study to exclude cardiovascular, renal or other serious disease.

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*Selected by Dr. H. T. Karsner from the Clinical-Pathological Conferences at Cleveland City Hospital, as the second of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems."

Tuberculosis Abstracts

Review for Physicians Issued by the National Tuberculosis Association and Distributed by Component Society, the Ohio Public Health Association

CONSTITUTION AND DIET IN TUBERCULOSIS

Resistance to disease may depend upon many things, but probably the most important, all other things being equal, is the inherited constitution. This belief is based on epidemiological studies, family records, studies of identical and fraternal twins, and animal experimentation. Excellent examples of each are cited and interpreted by the author.

The constitution can, however, be modified by outside influences not the least of which is the food we eat. That diet does influence the cause of tuberculosis has been well demonstrated by students of the problem during economic depressions and war.

For example, Denmark's experience during the World War is significant. In the belligerent countries the tuberculosis death rate rose steadily and reached its peak in 1918. In Denmark also the rate rose but the peak was reached in 1917 and fell precipitately. From the beginning of the war Denmark exported great quantities of butter, cattle and bacon; margarine replaced butter on the diet. There was loss of vitamins A and D. The consumption of meat and fish fell off. In 1917 the blockade interfered with exportation. The consumption of butter in Denmark promptly quadrupled, and that of meat increased almost fivefold. Total calories consumed did not vary much. All other factors that might influence the tuberculosis rate were accounted for. The consumption of meat and fish seemed to parallel the mortality curve inversely—the consumption of vegetables did not.

Isolation of the patient with open tuberculosis has reduced the chances of infection in others and has lessened perhaps the infecting dose and the possibility of repeated infections. Moreover, as the generations have come and gone, natural laws have acted to weed out the susceptibles. Better dietary habits, especially during the past twenty years, have enhanced inborn resistance to all diseases including tuberculosis. These two factors, the inherited constitution and the better understanding of nutrition, have played their part in the reduction of the tuberculosis mortality rate.—Fred H. Heise, M.D., Amer. Rev. of Tuber., Feb., 1941.

VITAMIN C AND TUBERCULOSIS

As healing in tuberculosis is characterized largely by the formation of connective tissue, and the latter is formed by the action of vitamin C on fibroblasts, it does not seem unreasonable to suspect that a vitamin C deficiency may be one of the causes of unfavorable trends in tuberculosis, if it does not actually contribute to exacerbations of the disease. Replenishment of such deficiency may help to change the disease from an unfavorable to a more favorable one. This reasoning led to a study of vitamin C in health and disease in addition to extensive therapeutic experiments made in a large series of cases of pulmonary tuberculosis.

The authors summarize previous studies of vitamin C—the normal daily requirements, the requirements in tuberculous individuals, results of analysis of organs for vitamin C, and other phases of the subject.

The authors' conclusions include the following:

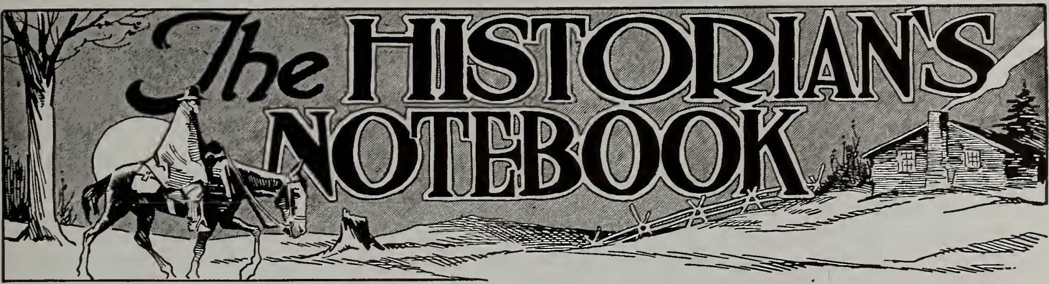
The observations justify the tentative recommendation that no patient should have less than the optimum standard dosage of 0.84 mg. per kilogram of body weight a day (50 to 60 mg. total) and that the quantity of the vitamin should be increased to 200 mg. a day progressively with the severity, activity and duration of the disease.

It was found that in saturation there was roughly 5 mg. of vitamin C per hundred grams of total body tissue, which would represent a total quantity of 3 to 5 gm. in the normal body. Without supplementary administration of vitamin C this quantity is dissipated in advanced tuberculosis before death, sometimes to a negligible quantity.

Frequently when the disease is far advanced, patients deficient in vitamin C are benefited by being kept saturated with the vitamin, as shown by a prolongation of life of the treated patients over the controls, as well as slightly more favorable clinical and laboratory observations. Adequate vitamin C is therefore just one of the many factors necessary for a proper treatment of tuberculosis.

No benefit was noted in an excess beyond saturation.—Henry C. Sweany, M.D., Charlotte Louise Clancy, M.D., Molly H. Radford, M.D., and Viola Hunter, M.Sc., Jour. of Amer. Med. Assn., Feb. 8, 1941.

The tuberculosis sanatorium cannot expect outside employers to hire ex-patients when it is not willing to set the example. Experience justifies the employment of ex-tuberculous patients in hospitals, provided the selection is carefully made and the patient receives proper medical attention.—Max Pinner, M.D., Tuber. San. Conf. of Met. N.Y., 1941.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

A Medical Pioneer of Trumbull County a Century Ago*

(Continued from April Issue)

HOWARD DITTRICK, M.D., Cleveland, Ohio

The notebook for the second session contains notes on dermatology from a lecture given by Professor John Delamater. He divides diseases of the skin into eight divisions with additional subdivisions. There is the division between wet and dry varieties, as illustrated by vesicular and squamous types respectively. Each division is further divided as, for example, the squamous types—lepra, psoriasis, pityriasis and ichthyosis. "Examine the eruption with great care," Professor Delamater taught, "and in the great majority of cases some elementary form of the eruption, as papillae, vesicles or pustules may be found in the neighborhood of the part principally affected or in some recent eruptions. Almost all cutaneous diseases are successive in their appearance which is often of great assistance in diagnosis."

This would seem to be a common sense approach to the study of diseases of the skin. Professor Delamater reviewed all the different manifestations of skin disease recognized at that time. In my own early days the field was thoroughly covered and then reduced to a simple classification. Mr. Irving H. Cameron, Professor of Surgery in Toronto, said that there were but three classes of skin disease, one that mercury would cure, one that sulphur would cure and one that the devil himself could not cure. Simpler still was the conclusion of Dr. Carl A. Hamann of Cleveland ("The King"), that there were but two, one that zinc oxide would cure and one that it wouldn't.

COMPOUNDING OF PRESCRIPTIONS

Professor Cassels taught the compounding of prescriptions. Like all of the faculty he gave the students very practical advice in the treatment of definite diseased conditions. Plasters for headache and for neuralgia, physic for bilious colic, remedy for tapeworm, prescriptions for cough syrup, these are some of the practical suggestions given to students who, as frontier physicians would have not only to compound medicines prescribed, but also to obtain by the irregular transportation along wilderness routes the ingredients for the remedy.

Evidently they had also to be prepared to advise treatment for animals. All old prescription books note a variety of such remedies. Webb's class notes reflect this in the item, "to prevent kidney worm in hogs, feed them corn boiled with ashes."

VARIETIES OF VALVULAR DISEASE TAUGHT

Webb was taught the different varieties of valvular disease that are recognized today. His teachers may not have classified the weakening heart under the name of "myocardial failure," but their practised fingers detected the same process in the small, soft, irregular pulse about as well as we do today with the more elaborate electocardiogram. To summarize, instruction in the second session was more practical and less didactic.

Dentistry was taught from a textbook, so must have had more emphasis than was reflected by its brief mention in Webb's class notes. There one lecture only is recorded in two paragraphs entitled "Mode of Applying the Turnkey in Extracting Teeth." It reads, "The fulcrum ought to be placed on the inner side of the bicuspids of the lower jaw and molars of the upper, and on the outside for the molars of the lower jaw. The Dentes Sapientiae of the upper jaw should never, according to Bell, be extracted with the Key because of the delicate texture of the bone on which the fulcrum must rest."

After the two sessions were completed there was the ordeal of examinations. There is no record among Webb's manuscripts that would indicate oral examinations. I wonder if he did have to take an oral examination under Horace Ackley. If so he would have had my sympathy. I remember my own experience under an old martinet of a professor who put us through our paces in anatomy. He would tramp to and fro beside a table covered with a confused litter of bones, doing a staccato drum solo on the table with a radius or femur, depending upon his mood. Suddenly he would bark at the terrified student, "Pick out the bones of the right wrist!" Pictures of Ackley suggest that he might have instilled plenty of the same sort of discomfiture into the epigastrium of a candidate.

DR. WEBB'S EXAMINATION PAPERS

Of Webb's examination papers we have enough to throw further light upon medical teaching. The type of question is illustrated in an anatomy paper from which I quote, "Suboccipital nerve arises nearly opposite to what; each consists of what, that passes under what, and from what, etc." Anatomy, physiology, materia medica, and history of medicine are the subjects represented in these papers, which probably covered the first session's lectures. Either the papers of his final examinations have been lost, or these tests were given orally. Two points about these papers are worth mention, namely the clear, legible, shaded script and the comprehensive manner in which both questions and answers cover the field taught.

A slip of paper, dated February 10, 1846, records payment of the graduation fee of twenty dollars. His diploma awarded by the Medical Department of Western Reserve College at Hudson and dated 1846, marks Abner Webb as a member of the third class to graduate in medicine from an institution now known as Western Reserve University.

Like many another student in the past one hundred years, he was still undecided where to settle. He was doubtless touched by "wanderlust", or by the old pioneer spirit, and decided to go farther west. But like a man of good judgment, he was taking along letters of recommendation from personages of standing who knew him and his family in his own locality.

Dr. C. C. Cooke and Dr. Henry Manning, both of Youngstown, and the latter also a banker, furnished him with letters of recommendation. Another letter, dated Youngstown, May 12, 1846, reads thus: "This is to certify that I am well acquainted with Abner Webb, M.D., and the family of which he is a worthy member. That they are all well and favorably known throughout this region as men honorable and upright in their intercourse with their fellow men and have always had the confidence and respect of the community where they reside."

"The bearer, A. Webb, has been a student of medicine in my office and passed a very satisfactory examination for his degree, doctor of medicine. And I take great pleasure in recommending him to the respectful notice of the community where he may locate as every way worthy of their confidence both as a practitioner of medicine and as a most worthy gentleman."

(Signed) T. Woodbridge, M.D.

Before enrollment and between sessions, students were often apprenticed to a preceptor, and this was very often done on a business basis. Such a contract between a doctor and a student is among our museum collections. Dr. Woodbridge was preceptor to Abner Webb. Beneath the above letter is a second note reading:

Briar Hill, May 18, 1846.

"I do most cheerfully state that I have been acquainted with Mr. Webb and his family for many years, and with pleasure say that he is deserving of the confidence of any community he may settle among."

(Signed) David Tod

David Tod was later Governor of Ohio. He was offered the post of Secretary of the Treasury in Lincoln's cabinet, but refused it.

Dr. Webb called also on his distinguished congressman, who seems to have been a little cautious in his recommendation. His letter reads:

Canfield, Ohio, May 13, 1846.

"To the Public:"

"Dr. A. Webb, the bearer, has permitted me to read several certificates recommending him to the favorable attention of the public as a gentleman and physician. My personal acquaintance with Dr. Webb is limited, but from the statements made by Drs. Manning, Cooke and Woodbridge, with whom I have been long acquainted, and who rank high in the profession and in the society where they reside, I commend him to the public at large, and to my friends and acquaintances in particular, if he shall become acquainted with the latter in his journeying, as worthy of their patronage and confidence. Many years ago I was acquainted with Dr. Webb's family connections and I accord with Dr. Woodbridge in saying they were highly respectable. Their removal to a greater distance from my residence, and my absence from home, have prevented me from having a personal acquaintance with younger members of the family. I shall rejoice to hear of Dr. Webb's success in business and wishing him health and happiness. I hope he may find friends wherever he may reside."

Most sincerely,
(Signed) Elisha Whittlesey

Armed with these valuable letters he started for the South West and this Missouri receipt is evidence of his whereabouts.

June 8, 1846

"Received of Dr. A. Webb three dollars and 25/100 for one seat in the stage from Milton to Hannibal."

(Signed) A. Annett

After a month of looking for prospective locations he made a start at Camden, Missouri. And Dr. Webb began to keep an account book which carries on the story of those early days in practice. Between the lines one may read of the hardships encountered by the average early physician whose pioneer patients probably rarely had any actual money. We believe Dr. Webb was supplied with ready money to bridge this time. We are impressed by his sound preparation for practice and by the limited opportunity he had to exercise the best of his skill. The first entry in the account book is dated July 11, 1846, the day he entered practice in Camden. Patients were mostly children, and his charges, including medicine, were from 25c to $2.25. On one occasion while making a visit he treated two daughters in the same household, charging $2.00, but there is no record of payment. He remained there only a fortnight, during which time he accumulated book accounts for $17.00 and collected fifty cents. So far as our records go, Dr. Webb left no more intimate picture of his Missouri experience or the conditions of practice there than is shown in these few entries in his account book. But Mark Twain's Autobiography is deliciously reminiscent of his boyhood days in Missouri, and in that same year Mark Twain was eleven years old. That year and many others too, he visited his uncle's farm four miles from his home town, Florida, Missouri.

PRACTICED IN MISSOURI

Describing the high swings made of bark stripped from hickory saplings, Mark Twain said: "They usually broke when the child was forty feet in the air, and that was why so many bones had to be mended each year. I had no ill luck myself but none of my cousins escaped. There were eight of them, and at one time and another, they broke fourteen arms among them. But it cost next to nothing, for the doctor worked by the year—twenty-five dollars for the whole family. I remember two of the Florida doctors, Chowning and Meredith. They not only tended an entire family for twenty-five dollars a year, but furnished the medicine themselves. Good measure too. Only the largest persons could hold a whole dose. Castor oil was the principal beverage. The dose was half a dipperful, with half a dipperful of New Orleans molasses added to help it down and make it taste good, which it never did. The next stand-by was calomel; the next rhubarb; the next jalap. Then they bled the patient and put mustard plasters on him. It was a dreadful system, and yet the death rate was not heavy. The calomel was nearly sure to salivate the patient and cost him some of his teeth. There were no dentists. When teeth were touched by decay or otherwise ailing, the doctor knew of but one thing to do—he fetched his tongs and dragged them out. If the jaw remained, it was not his fault. Doctors were not called in cases of ordinary illness; the family grandmother attended to those. Every old woman was a doctor, and gathered her own medicines in the woods, and knew how to compound doses that would stir the vitals of a cast-iron dog. And then there was the "Indian doctor"; a grave savage, remnant of his tribe, deeply read in the mysteries of nature and the secret properties of herbs; and most backwoodsmen had high faith in his powers and could tell of wonderful cures achieved by him. . . . We had the "faith doctor", too, in those early days—a woman. Her specialty was toothache. She was a farmer's old wife and lived five miles from Hannibal. She would lay her hands on the patient's jaw and say, "Believe!" and the cure was prompt. Mrs. Utterback. I remember her very well. Twice I rode out there behind my mother, horseback, and saw the cure performed. My mother was the patient."

So now we know why Dr. Webb collected only fifty cents for two weeks' practice in Missouri. The competition against three systems—yearly fee, grandmother lore and "Indian doctors" (not to mention faith cure)—this competition, I repeat, was just too much. Two weeks was enough.

After an interval of six months, during which he may have found more lucrative work, we find him practicing in Austintown, near Youngstown. His first patient, Edward Jones, paid $2.12½ for four visits and the necessary medicines. The following month being February and a short month, he entered charges of only 81½c, but fortunately his collections were 100 per cent. One Jacob Crum must have had a protracted illness, for he ran up charges of $3.62½, including 25c for bitters, but his only credit item reads "Shoeing mare, front shoes, 50c. Among the charges we note, "venesection and medicine, 25c", "extracting tooth for daughter, 12½c", "opening abscess, 12½c".

In three and a half months of practice in Austintown, Dr. Webb had put on his books $9.06½, and of this he had collected $3.88 which included the contra account for shoeing the mare.

A FORTUNATE MOVE

On May 7, 1847, Dr. Webb moved to Girard, and what a fortunate move it proved to be! We surmise that his experience in Austintown had proved so discouraging that his disappointment had crept into his letters to Dr. Kirtland, for the latter wrote Webb in July of that year as follows: "The great secret of success in the medical profession consists in industry, perseverance and devotion to the business. Think and talk of nothing else. Read every medical book you can obtain and keep up with the rapid improvements that are constantly being made in its different branches. Be not discouraged for the first year or two, you will ultimately succeed."

Shortly afterward Dr. Kirtland wrote again, "Some cases of emigrant fever have occurred here; they differ in no respect from the low typhus that occurred in Trumbull County in 1828-31. Combining with the malarious action in the vicinity of the lake, it is producing some severe cases of disease."

During Dr. Webb's first month in Girard his accounts showed eighty-four entries for a total of $25.15¾, with collections of $4.27½ cash and $7.02 in goods. Charges for his visits ranged from 50c, doubtless at his home, to $1.00 for outside calls, and included medicines required. Among these medicines we note morphine, quinine, cream of tartar, anise, asafetida, cinnamon, wintergreen, peppermint, corrosive sublimate, catechu, pills for physic, intermittent pills, strengthening plaster, and blister plaster. In making charges for ointment and pills, the size of the box determined the price, regular size 25c, small size 10c. One item shows a charge of 12½c for sulphur and cream of tartar, with no suggestion that molasses be added. He supplied also paregoric, laudanum, flowers of sulphur, sweet spirits of niter, ipecac, borax, colchicum, red oxide, blue ointment, senna, magnesia, olive oil, castor oil, peruvian bark, and cough remedy.

In January, 1848, he began to vaccinate patients, charging 50c, and in March of that year he vaccinated 35 patients. Quinine was dispensed at 12½c per dose. Many charges were made during August and September when malaria and other fevers were prevalent.

CURRENT FEES

Other charges illustrating current fees for services include, "vomit for wife, 25c," "worm medicine for child, 25c," "a vial of laudanum, 12½c," "venesection, 10c" (though the usual fee was 18¾c), "dressing wound, 12½c," "dressing wound and examination, 25c," "examination on eyes, 25c." Teeth were extracted for 18¾c each, but at night this was increased to 25c.

He too was exposed to the importunities of patients; on two occasions he noted, "to money lent, 75c" (which was more than he had collected for his two weeks of practice in Camden, Missouri). More fortunate than most of us and than himself in later years, both items were paid.

Drugs were purchased in May, 1847, from Edward E. Hoyt & Co. of Warren, Bates & Co. of Cincinnati, and R. G. Garlick of Youngstown. The Hoyt consignment for $6.98 is receipted in full. Two items of passing interest are sulphuric ether and adhesive plaster. The Bates bill included, besides drugs, catheters, sponges, a dissecting case, pocket case, tooth drawer, forceps, spring lancet, thumb lancet, and an iron mortar. From Mr. Garlick he purchased drugs and other items including court plaster, a book of gold leaf, glass syringes. Quinine cost $3.25 an ounce and oil of wintergreen 34c an ounce. This R. G. Garlick was incidentally a maker of daguerrotypes which leads us to believe he was a brother of Dr. Theodatus Garlick, who graduated in medicine from the University of Maryland and came to Cleveland in 1850.

On one account Dr. Webb accepted some foxglove at a credit of 20c. As an indication of his interest in solution of community problems, we find he purchased a newly published book on "Civil Government" for 50c.

EXPENSES AND COLLECTIONS

In those early days medical practice included many business transactions. Dr. Webb's accounts were often settled by written orders on other business people. In harvest time when practice was slack, he hired out his horse to cut grain for 50c a day. As a matter of fact, during the summer of 1847, this tall husky young doctor earned in the harvest fields $10.49½, his wages being 75c a day.

Expenses for his horse included, "by making one horse shoe and finding iron," also "for setting two shoes purchased." The amount of the charge is not stated. For oats he paid from 18¾c to 20c a bushel and for corn on the ear, the same price.

Coal cost him 6¼c a bushel. Abraham Erwin was credited at one time with $3.50 for "finding leather and making a pair of boots"; for a pair of coarser boots he was credited $3.00.

To one account rendered in September, 1847, amounting to $7.85, a notation was added "to interest added May 1, 1860, $5.92, making a total of $13.77. Evidently he had no other satisfaction than that afforded by figuring out the full extent of this loss from an unpaid bill. One patient whose account was delinquent for 1½ years, was credited $1.50 for making two fine shirts and 50c for making two more of flannel, but the unpaid balance was $5.22½.

Dr. Webb continued to study, as evidenced by his book of prescription and treatment notes, which included a wide variety of remedies gathered from many sources. During those early days of practice he devoted time to compiling this useful information against its future need. This book of prescriptions, materia medica and treatment could form an entire paper. Among the contents we note prescriptions copied from Druit's surgery, suggestions for treatment of various gynecological conditions, method of prevention and treatment of milk abscess. There are even directions for making a shield for the horse "against teasing flies." There is a French physician's treatment for hydrophobia (a solution of chloride of lime used externally), and an English officer's use of an inhalation of the smoke of burning rosin as a cure for consumption. A modern note is sounded in a remedy for hemorrhoids, "bowels should be kept open by use of bran bread."

In 1849 Dr. Webb, together with Dr. Russell of Niles, took up practice in Bowling Green just south of Toledo. Cholera was raging along the lakes at this time and it was significant that an entry in his notebook on the page dated Bowling Green, May 2, 1849, is a receipt "said to cure the cholera by Dr. Cartwright of New Orleans," where, by the way, cholera was a frightful scourge at the time.

"Take of

Calomel or Hydrargyrum cum Cretae	20 grs.
Cayenne Pepper	10 grs.
Camphor (finely powdered)	15 grs.
Calcined Charcoal and Acacia	15 grs.

To be given at one dose in some cold water at one draught; if this does not start perspiration then give some hot or heating medicine, as cayenne pepper or hot herb teas. This, together with the application of hot bottles to the extremities, will generally procure a sweating; if not, the leech must be used. To allay vomiting, a mustard poultice to the stomach and morphia in a little spirits of camphor. If the morphia should affect the head, drink some coffee after it."

POSTGRADUATE STUDY

That fall Dr. Webb was back in Austintown, having apparently gone to Bowling Green only to help with the cholera epidemic. Of the next twelve years we have no record, presumably he remained in practice in either Austintown or Girard or both. But in 1861, having procured letters of introduction from the leading doctors of Youngstown, Drs. Woodbridge, Shannon, Manning and Cooke, to the faculty of Jefferson Medical College, he set out for Philadelphia. He registered for a matriculation ticket at the Philadelphia Hospital for both Jefferson and the University of Pennsylvania. In addition he took courses in surgery under Dr. Samuel D. Gross and in the Institute of Medicine under Dr. Robley Dunglison, both Jefferson professors. Perhaps he had been attracted to Jefferson by these two outstanding medical teachers. It is evident that he considered a refresher course in the College Avenue Anatomical School, but his entrance there is uncertain.

At the end of this postgraduate study he wrote the required thesis, choosing as his subject "Scarlatina." This consists of 22 pages of foolscap size. Four pages are devoted to description of signs and symptoms, and could be read today with profit.

Another essay was written on "Scarlet Fever", but its purpose is not indicated. From this essay we quote "In cases attended by very frequent pulse, advantage is sometimes derived from the use of digitalis given in small dises every four hours." Although his thesis on scarlatina was credited, he had not passed a sufficient number of courses to win a degree from Jefferson. A requirement which stood in his way read, "He must have attended two full courses of lectures in some respectable medical school, one of which shall have been in this college."

Dr. Webb then returned, in 1862, at 41 years of age, to practice in Girard. He had spared neither time nor expense to fit himself for the years to come in medicine. The affluence of his family had doubtless permitted him to do this without financial anxiety.

And then, on October 7, 1869, at the age of 48, Dr. Webb married. According to the marriage license, which I had the opportunity to examine, this was issued in Mahoning County. His wife's name, Garghill, was a variant of Ghagen, and had been adopted by the community when the family came there from sheer inability of the settlers to understand the correct name as pronounced with the family's Irish accent. Margaret had grown up from childhood as Margaret Garghill, and county histories perpetuate this spelling.

Though Dr. Webb had five other brothers and sisters, there threatened to be no issue among them, one couple being childless and others marrying late in life as did Dr. Webb. His father became agitated lest the family's means should revert to New England relatives, which would have proved most distasteful to him. He used to thump on the table with his fist and declare that a hundred dollars in gold would be flung into the lap of the first daughter or daughter-in-law to bring forth a child. I do not have the family record of the others, but Dr. Abner Webb did have a son and a daughter, and it is through the courtesy of his son, Mr. Abner Grant Webb, that we have this historic material.

On April 2, 1874, there was correspondence about an acute illness suffered by Dr. Webb. He was attended by Drs. T. and J. E. Woodbridge, his lifelong friends, and was operated upon by Dr. Sawyer for some malady not recorded. This condition may have finally caused his death on November 30, 1874. His last years had been spent in ill health in Girard.

In reviewing these manuscripts we are impressed with the amount and quality of medical instruction provided by Western Reserve College a hundred years ago. In many branches the essentials taught at that time still hold true. Bacteriology, clinical microscopy and laboratory findings have contributed greatly to the understanding and treatment of disease. In many instances it has been necessary to change entirely the then accepted treatment. However, in the last analysis, today as well as yesterday, diagnosis and treatment must be based upon history of the illness, critical observation and physical examination of the patient, carefully interpreted by the knowledge and judgment which has accumulated through previous training and years of experience.

Members of the State Association who have any material dealing with the history of Medicine in Ohio, especially official proceedings of The Ohio State Medical Society prior to 1870, are requested to communicate with Jonathan Forman, chairman of the Committee on Medical History and Archives of the Ohio State Archaelogical and Historical Society, 1005 Hartman Theater Building, Columbus, Ohio.

Ninety-Fifth Annual Meeting of State Association To Be Held in Cleveland Week of June 1, Jointly With A.M.A. Session; House of Delegates Will Meet June 3 and 4

NINETY-FIFTH Annual Meeting of the Ohio State Medical Association will be held in Cleveland the week of June 1, in conjunction with the Ninety-Second Annual Session of the American Medical Association in that city.

Hotel Cleveland has been selected as the headquarters for the Ohio State Medical Association.

The Ohio State Medical Association will not present a scientific program and exhibits inasmuch as Ohio fellows of the A.M.A. will have the privilege of attending the Scientific Assembly of the A.M.A. and the excellent scientific and technical exhibits held as a part of the A.M.A. session.

There will be two sessions of the House of Delegates of the Ohio State Medical Association at which routine and new business will be transacted, including the election of officers and councilors for the ensuing year.

The first session of the House of Delegates of the State Association will be held at 4 p.m. Tuesday, June 3, in the Rose Room, Hotel Cleveland. The second and final session will be held in the Main Ballroom, Hotel Cleveland, Wednesday, June 4, 6:30 p.m. This session will be opened with a complimentary dinner for Ohio delegates. The business session will follow the dinner.

Following is the order of business for the two sessions of the House of Delegates of the State Association and the roster of official delegates and alternates of the various county medical societies:

House of Delegates

Ohio State Medical Association

OPENING SESSION

Tuesday Afternoon, June 3, 4:00 o'clock
Meeting Place—Rose Room, Main Lobby Floor
Hotel Cleveland

Presentation of the President of the Ohio State Medical Association by Charles T. Way, M.D., President, Academy of Medicine of Cleveland.

1. Annual Address of the President, William M. Skipp, M.D., Youngstown.
2. Call to Order by the President.
3. Roll Call.
4. Consideration of the Minutes of last Annual Meeting. (June, 1940, issue, *The Journal.*)
5. Appointment of Reference Committees by the President:
    - (a) Committee on Presidential Address.
    - (b) Committee on Resolutions.
    - (c) Committee on Annual Reports.
    - (d) Committee on Credentials of Delegates.
    - (e) Committee on Tellers and Judges of Election.
    - (f) Committee on Time and Place of 1942 Annual Meeting.
6. Reports of Standing Special Committees: (Reports submitted by title only.)
    - (a) Public Relations and Economics—Barney J. Hein, M.D., Toledo, Chairman.
    - (b) Education—Clyde L. Cummer, M.D., Cleveland, Chairman.
    - (c) Judicial and Professional Relations — James G. Kramer, M.D., Akron, Chairman.
    - (d) Auditing and Appropriations — C. C. Sherburne, M.D., Columbus, Chairman; James A. Beer, M.D., Columbus, Treasurer.
    - (e) Medical Preparedness—Harry V. Paryzek, M.D., Cleveland, Chairman.
    - (f) Bureau of Public Education.
7. Nomination and Election of Committee on Nominations:
   (Nominations from the floor with one representative from each Councilor District. This committee shall report to the second session, Wednesday, 6:30 p.m., its recommendations in the form of a ticket containing nominees for constitutional offices as required under the Constitution and By-Laws.)
8. Introduction of Resolutions:
   (Resolutions must be introduced at this session of the House of Delegates, referred to the Reference Committee on Resolutions, and reported back to the House of Delegates at the Wednesday evening session before any action can be taken. All resolutions must be typewritten and submitted in duplicate.)
9. Submission of Invitations for next Annual Meeting:
   (It is necessary that invitations for the 1942 Annual Meeting be referred to the Reference Committee on Time and Place of Annual Meeting.)
10. Miscellaneous Business.
11. Recess.

SECOND AND FINAL SESSION

Wednesday Evening, June 4, 6:30 o'clock
Meeting Place—Main Ballroom, Mezzanine Floor
Hotel Cleveland

Complimentary Dinner for Delegates and Officers.
Final Business Session:

1. Roll Call.
2. Consideration of unfinished business from Tuesday's session of the House of Delegates.
3. Reports of Reference Committees:
   - (a) Committee on Time and Place of 1942 Annual Meeting.
   - (b) Committee on Presidential Address.
   - (c) Committee on Annual Reports.
   - (d) Committee on Resolutions.
4. Miscellaneous Business.
5. Election of President-Elect. Nominations from the floor.
6. Report of Committee on Nominations:
   - (a) Election of Members of The Council. (Members of The Council are elected for two-year terms, terms of those representing even numbered districts expiring in odd numbered years.)
     To be elected:
     Councilor, Second District—(Incumbent, D. W. Hogue, M.D., Springfield).
     Councilor, Fourth District—(Incumbent, E. J. McCormick, M.D., Toledo).
     Councilor, Sixth District—(Incumbent, R. L. Rutledge, M.D., Alliance).
     Councilor, Eighth District—(Incumbent, George F. Swan, M.D., Cambridge).
     Councilor, Tenth District—(Incumbent, C. C. Sherburne, M.D., Columbus).
   - (b) Election of Delegates and Alternates to the American Medical Association for term of two years.
     Those whose terms expire at this time are:
     Barney J. Hein, M.D., Toledo.
     Charles R. Meek, M.D., Lorain (Alternate).
     C. E. Kiely, M.D., Cincinnati.
     E. O. Swartz, M.D., Cincinnati (Alternate).
     Claude B. Norris, Youngstown.
     Dow Allard, M.D., Portsmouth (Alternate).
7. Installation of Officers for 1940-1941.
8. Submission of committee appointments by new President for confirmation by House of Delegates.
9. Unfinished Business.
10. Adjournment.

DELEGATES AND ALTERNATES

Counties	Delegates	Alternates
ADAMS	S. J. Ellison	R. L. Lawwill
ALLEN	J. R. Tillotson	Wm. Virgil Parent
ASHLAND	M. D. Shilling	John A. Riebel, Jr.
ASHTABULA	R. B. Wynkoop	Perry R. Longaker
ATHENS	C. N. Sanders	Byron Danford
AUGLAIZE	Geo. B. Faulder	Chas. C. Berlin
BELMONT	W. Miles Garrison	J. O. Howells
BROWN	Geo. P. Tyler, Jr.	R. B. Hannah
BUTLER	Chas. T. Atkinson	Harry M. Lowell
CARROLL	Carl A. Lincke	Jos. D. Stires
CHAMPAIGN	D. C. Houser	M. C. Houston
CLARK	C. E. M. Finney	E. W. Keefer
CLERMONT	John T. Crone, Jr.	J. M. Coleman
CLINTON	Robert Conard	Elizabeth Shrieves
COLUMBIANA	J. A. Fraser	P. H. Beaver
COSHOCTON	J. G. Smailes	A. P. Magness
CRAWFORD	E. C. Brandt	John M. Kidd
CUYAHOGA	Chas. T. Way	P. G. Albrecht
	C. E. Kinney	R. K. Updegraff, Jr.
	John E. Rauschkolb	L. W. Ladd, Jr.
	A. Strauss	O. B. Pomeroy
	Ralph M. Watkins	C. D. Waltz
	E. F. Kieger	E. A. Marshall
	M. Paul Motto	Russell L. Haden
	Wm. E. Hill	M. L. Siegel
	M. F. Oman	Harry Hauser
	D. S. Spreng	Farrell T. Gallagher
	A. Carlton Ernstene	C. H. Kuhlmann
	James T. Collins	B. B. Larsen
DARKE	C. I. Stephen	Paul G. Lenhert
DEFIANCE	D. J. Slosser	Paul B. Newcomb
DELAWARE	M. W. Davies	W. E. Borden
ERIE	Ross M. Knoble	H. L. Sowash
FAIRFIELD		Chas. B. Crow
FAYETTE	James F. Wilson	James E. Thomson
FRANKLIN	John M. Thomas	Robin C. Obetz
	Geo. T. Harding	Link M. Murphy
	E. J. Emerick	Harry E. LeFever
	I. B. Harris	John H. Mitchell
	L. L. Bigelow	John E. Brown, Jr.
	Russel G. Means	Roy J. Secrest
FULTON	R. W. Reynolds	C. Harold Heffron
GALLIA	Francis W. Shane	C. E. Richards
GEAUGA	Lucy S. Hertzog	C. F. Gilmore
GREENE	H. C. Messenger	C. G. McPherson
GUERNSEY	Fred W. Lane	Wm. L. Denny
HAMILTON	Howard D. Fabing	Ralph W. Eddy
	Henry B. Freiberg	Carroll J. Fairo
	Emil R. Swepston	Richard D. Bryant
	Wm. J. Topmoeller	Daniel E. Early
	Max M. Zinninger	D. W. Heusinkveld
	Lloyd B. Johnston	Leon Schiff
	Charles J. McDevitt	Theodore H. Vinke
	E. O. Swartz	Eugene B. Ferris, Jr.
HANCOCK	Frank M. Wiseley	Henry P. Koehler
HARDIN	Don R. Printz	W. P. Rickert
HARRISON	Carl F.Goll	Edward L. Miller
HENRY	J. J. Harrison	Thos. Quinn
HIGHLAND	H. W. Chaney	J. H. Frame
HOCKING	Allan A. Cole	C. T. Grattidge
HOLMES	Luther W. High	J. C. Elder
HURON	J. .D.Bradish	
JACKSON	Marlin R. Wedemeyer	Wm. R. Riddell
JEFFERSON	S. J. Podlewski	S. A. Harris
KNOX	F. C. Anderson	James F. Lee
LAKE	V. N. Marsh	
LAWRENCE	George G. Hunter	F. R. Stewart
LICKING	George A. Gressle	J. Fleek Miller
LOGAN	F. Blair Webster	Charles L. Barrett
LORAIN	Charles R. Meek	Robt. A. Stack
	Geo. D. Nicholas	A. S. McKitrick
LUCAS	A. A. Brindley	Karl D. Figley
	E. G. Galbraith	L. D. Miller
	R. C. Young	C. E. Hufford
	F. N. Nagel	H. M. Scott
MADISON	Herman E. Karrer	W. A. Holman
MAHONING	Walter K. Stewart	Wm. H. Evans
	Edward J. Reilly	Dean A. Nesbit
	Gordon G. Nelson	J. N. McCann
MARION	Floyd D. Yeager	John A. McNamara
MEDINA	H. T. Pease	H. G. Lehrer
MEIGS	P. A. Jividen	Robt. R. Boice
MERCER	R. B. Benning	R. J. Beare
MIAMI	G. A. Woodhouse	E. G. Puterbaugh
MONROE	A. R. Burkhart	
MONTGOMERY	Paul L. Yordy	M. R. Haley
	C. J. Derby	Ralph D. Dooley
	A. W. Carley	E. McCall Smith
MORGAN	A. A. Tombaugh	
MORROW	Wm. Lowell Murphy	J. P. Ingmire
MUSKINGUM	M. A. Loebell	C. F. Sisk

Counties	Delegates	Alternates
OTTAWA	L. L. Belt	F. E. Miller
PAULDING	L. R. Fast	D. E. Farling
PERRY	James Miller	Edgar D. Allen
PICKAWAY	A. D. Blackburn	V. D. Kerns
PIKE	L. E. Wills	Robt. M. Andre
PORTAGE	John M. Painter	Myron W. Thomas
PREBLE	G. W. Flory	J. I. Nisbet
PUTNAM	W. D. Hickey	C. W. Bird
RICHLAND	John S. Hattery	Hugh Winbigler
ROSS	O. P. Tatman	Robert E. Quinn
SANDUSKY	T. R. Cunningham	C. J. Wolf
SCIOTO	Gilbert R. Micklethwaite	Dow Allard
SENECA	R. R. Hendershott	E. H. Porter
SHELBY	R. W. Alvis	H. E. Crimm
STARK	George N. Wenger	Kay E. Liber
	A. R. Basinger	J. E. Aten
	J. Edwin Purdy	L. E. Anderson
SUMMIT	Robt. T. Allison, Jr.	R. E. Pinkerton
	Harvey H. Musser	
	Carl R. Steinke	H. V. Sharp
TRUMBULL	R. D. Herlinger	J. D. Knox
TUSCARAWAS	J. W. Calhoon	Burrell Russell
UNION	James M. Snider	P. D. Longbrake
VAN WERT	J. R. Jarvis	G. Austin Edwards
VINTON	H. D. Chamberlain	
WARREN	N. A. Hamilton	
WASHINGTON	R. M. Meredith	Ford E. Eddy
WAYNE	R. C. Paul	L. G. Strauss
WILLIAMS	H. W. Wertz	H. R. Mayberry
WOOD	Paul F. Orr	J. R. Janney
WYANDOT	J. Craig Bowman	F. M. Kenan

OFFICERS

President	Wm. M. Skipp	Treasurer	James A. Beer
Pres.-Elect	Harry V. Paryzek	Past-Pres.	Parke G. Smith

COUNCILORS

District		District	
First	L. Howard Schriver	Sixth	Ralph L. Rutledge
Second	D. W. Hogue	Seventh	Carl Goehring
Third	Guy E. Noble	Eighth	George F. Swan
Fourth	E. J. McCormick	Ninth	I. P. Seiler
Fifth	Edgar P. McNamee	Tenth	C. C. Sherburne
		Eleventh	S. V. Burley

Detailed Data About A.M.A. Session at Cleveland, June 2-6

THE Ninety-Second Annual Session of the American Medical Association will be held in Cleveland, Monday through Friday, June 2-6. Over 6,000 Fellows of the A.M.A. attended its last session in Cleveland in 1934. Advance hotel reservations indicate that figure will be exceeded this year.

The House of Delegates will convene at 10 a.m. Monday, June 2, at the Hotel Statler. The opening general meeting of the Scientific Assembly will begin at 8 o'clock, Tuesday evening, June 3, in the Music Hall, Arena Floor, Cleveland Public Auditorium. This meeting will be open to the public. Speakers will include Governor John W. Bricker.

Section meetings will be held on Wednesday, Thursday and Friday, June 4, 5 and 6. The accompanying box gives a complete schedule of meeting places.

SECTIONS OPEN AT 9 A.M.

The following sections will convene at 9:00 a.m. each day: Practice of Medicine; Obstetrics and Gynecology; Laryngology, Otology and Rhinology; Pathology and Physiology; Preventive and Industrial Medicine and Public Health; Urology; Orthopedic Surgery; Section on Anesthesiology.

Convening at 2:00 p.m. each day will be the following sections: Surgery, General and Abdominal; Ophthalmology; Pediatrics; Pharmacology and Therapeutics; Nervous and Mental Diseases; Dermatology and Syphilology; Gastro-Enterology and Proctology; Radiology.

Registration Bureau, General Headquarters, Scientific Exhibit, Technical Exhibits, Information Bureau and Branch Postoffice will be located in the Cleveland Public Auditorium. The Registration Department will be open from 8:30 a.m. to 5:30 p.m. on Monday through Thursday, June 2-5, and from 8:30 a.m. to 12:00 noon on Friday, June 6. Members of the House of Delegates of the A.M.A. may register in the Pine Room, Hotel Statler.

ONLY FELLOWS MAY ATTEND

Only Fellows, affiliate, honorary and associate fellows may register and take part in the work of the scientific sections. Fellows of the Scientific Assembly are those who have, on the prescribed form, applied for Fellowship, subscribed to *The Journal of the A.M.A.*, and paid their Fellowship dues for the current year. Fellowship dues and subscription to *The Journal* are included in the one annual payment of eight dollars, which is the regular subscription price of *The Journal.* **All members of the Ohio State Medical Association who plan to attend the A.M.A. meeting at Cleveland, and are not Fellows of the A.M.A., should secure an application blank immediately from the headquarters of the A.M.A., 535 North Dearborn St., Chicago. It will be possible for members of the A.M.A. to qualify as Fellows at Cleveland. Ohio applicants for Fellowship will be required to present their 1941 membership cards in the Ohio State Medical Association at a booth in the Registration Headquarters marked "Applicants for Fellowship and Invited Guests".** Officials of the A.M.A. urge that all Fellows living in Cleveland and vicinity register as early as possible on Monday and Tuesday. Names of those who register will be included in the issue of the Daily Bulletin appearing the next day, and this will enable visiting physicians to find friends who have registered.

SPECIAL EXHIBITS

The official program for the Cleveland session appeared in the April 26 issue of *The Journal of the A.M.A.* Although complete details were not available when this issue of *The Ohio State Medical Journal* went to press, advance information indicates that this meeting will be one of the finest in the history of A.M.A. meetings. In addition to the scientific sessions, there will be an exceptionally fine Scientific Exhibit. Featured this year are two special exhibits—fractures and lame backs. There will also be a group of exhibits on national defense and war medicine; heart disease, treatment of burns and air-borne

A.M.A. MEETING PLACES

House of Delegates: Euclid Ball Room, Hotel Statler, Euclid at East Twelfth Street.

Opening General Meeting: Music Hall, Arena Floor, Cleveland Public Auditorium.

General Scientific Meetings: Music Hall, Arena Floor, Cleveland Public Auditorium.

General Headquarters, Scientific Exhibit, Registration Bureau, Technical Exhibits, Information Bureau and Branch Postoffice: Cleveland Public Auditorium.

SECTIONS OF SCIENTIFIC ASSEMBLY

Practice of Medicine: Ball Room, Fourth Floor, Cleveland Public Auditorium.

Surgery, General and Abdominal: Music Hall, Arena Floor, Cleveland Public Auditorium.

Obstetrics and Gynecology: Music Hall, Arena Floor, Cleveland Public Auditorium.

Ophthalmology: Ball Room of Hotel Hollenden, Superior at East Sixth Street.

Laryngology, Otology and Rhinology: Ball Room of Hotel Hollenden, Superior at East Sixth Street.

Pediatrics: Ball Room, Fourth Floor, Cleveland Public Auditorium.

Pharmacology and Therapeutics: South Hall C, Fourth Floor, Cleveland Public Auditorium.

Pathology and Physiology: South Hall C, Fourth Floor, Cleveland Public Auditorium.

Nervous and Mental Diseases: Little Theatre, Arena Floor, Cleveland Public Auditorium.

Dermatology and Syphilology: Club Room B, Third Floor, Cleveland Public Auditorium.

Preventive and Industrial Medicine and Public Health: South Hall A, Second Floor, Cleveland Public Auditorium.

Urology: Club Room B, Third Floor, Cleveland Public Auditorium.

Orthopedic Surgery: Little Theatre, Arena Floor, Cleveland Public Auditorium.

Gastro-Enterology and Proctology: South Hall A, Second Floor, Cleveland Public Auditorium.

Radiology: South Hall B, Third Floor, Cleveland Public Auditorium.

Anesthesiology: South Hall B, Third Floor, Cleveland Public Auditorium.

The Cleveland Public Auditorium is located on Lakeside Avenue at East Sixth Street.

infections. Motion pictures will be shown on regular schedules in six rooms adjoining the exhibits.

Admission to the Scientific Exhibit will be limited to persons wearing Fellowship or other badges of the convention and to guests to whom special cards of admission have been issued. The public will not be admitted to the Scientific Exhibit.

OHIO DELEGATION

The Ohio State Medical Association will be represented in the House of Delegates by Dr. Barney J. Hein, Toledo; Dr. C. E. Kiely, Cincinnati; Dr. Claude B. Norris, Youngstown; Dr. Ben R. McClellan, Xenia; Dr. Carl R. Steinke, Akron; Dr. E. R. Brush, Zanesville; Dr. John B. Alcorn, Columbus. Dr. Clyde L. Cummer, Cleveland, is a member of the House of Delegates, representing the Section of Dermatology and Syphilology. Dr. Parke G. Smith, Cincinnati, vice-president of the A.M.A., and Dr. Geo. Edw. Follansbee, chairman of the Judicial Council, will also participate in the sessions.

Capably heading the Local Committee on Arrangements is Dr. Clyde L. Cummer, chairman, assisted by Dr. Harry V. Paryzek, vice-chairman, and Dr. Torald Sollmann, chairman, Honorary Committee.

CLEVELAND COMMITTEES

Following are the chairmen of the various Cleveland subcommittees, which are assisting Dr. Cummer and cooperating with the staff of the A.M.A. in completing plans for the Cleveland meeting.

Subcommittee on Sections and Section Work: C. T. Way.
  Practice of Medicine: Joseph M. Hayman, Jr.
  Surgery, General and Abdominal: Harry G. Sloan.
  Obstetrics and Gynecology: James L. Reycraft.
  Ophthalmology: Albert D. Ruedemann.
  Laryngology, Otology and Rhinology: Harry C. Rosenberger.
  Pediatrics: Charles W. Burhans.
  Pharmacology and Therapeutics: Russell L. Haden.
  Pathology and Physiology: Rafael Dominguez.
  Nervous and Mental Diseases: Louis J. Karnosh.
  Dermatology and Syphilology: Charles G. LaRocco.
  Preventive and Industrial Medicine and Public Health: Harold J. Knapp.
  Urology: Herbert B. Wright.
  Orthopedic Surgery: Clarence H. Heyman.
  Gastro-Enterology and Proctology: Fred C. Oldenburg.
  Radiology: Lawrence A. Pomeroy.
  Anesthesiology: B. B. Sankey.
Subcommittee on Registration: M. Paul Motto.
Subcommittee on Scientific Exhibit: Robert M. Stecher.

NOW'S THE TIME TO BECOME FELLOW OF THE A.M.A.

Since the 1941 session of the American Medical Association will be held in Cleveland next June 2-6, every eligible Ohio physician will want to attend as many sessions as possible of that great medical gathering. To be "eligible" to attend, a physician must be a Fellow of the A.M.A. Right now is the time for each physician to take care of this important matter by making formal application for Fellowship by writing directly to the American Medical Association, Chicago. Every member of the American Medical Association (every member of the Ohio State Medical Association) is eligible to apply for Fellowship. Cost of Fellowship is $8.00 per year, the same as the subscription to The Journal of the A.M.A. and when a physician becomes a Fellow he receives The Journal of the A.M.A. free.

OHIO DOCTORS SHOULD APPLY NOW FOR FELLOWSHIP IN THE A.M.A.

Subcommittee on Information: A. Carlton Ernstene.
Subcommittee on Hotels and Housing: Edward F. Kieger.
Subcommittee on Publicity: Howard Dittrick.
Subcommittee General Scientific Meetings: Russell L. Haden.
Subcommittee on Finance: A. Carlton Ernstene.
Subcommittee on Entertainment:
  Opening General Meeting: Ralph M. Watkins.
  President's Reception and Ball: B. B. Larsen.
  Dinner for Delegates: Harry D. Piercy.
  Alumni and Fraternity Reunions: Hiram O. Studley.
Subcommittee on Golf: John B. Morgan.
Subcommittee on Women Physicians: Ruth A. Robishaw.
Subcommittee on Woman's Auxiliary: Mrs. Fred C. Oldenburg.

Requests for hotel reservations should be addressed to Dr. Edward F. Keiger, Chairman, Hotel Committee, 1604 Terminal Tower, Cleveland. Information concerning Cleveland hotel accommodations and a coupon to be used in requesting reservations has appeared in each issue of *The Ohio State Medical Journal* since January and is reproduced elsewhere in this issue.

Headquarters for the Woman's Auxiliary to the American Medical Association and the Woman's Auxiliary to the Ohio State Medical Association will be at the Hotel Carter. Women guests to the meeting are urged to register there and to take part in the program and entertainment which is being arranged.

Annual A.M.A. Golf Tournament To Be Held in Cleveland, June 2

The American Medical Golfing Association's Twenty-Seventh Annual Tournament will be held at Cleveland Country Club-Pepper Pike Club, Cleveland, Monday, June 2. Two famous championship courses and a beautiful clubhouse await the nation's medical golfers in Cleveland on the occasion of the A.M.A. Convention.

Some 250 of the 1,413 Fellows of the A.M.G.A. are expected to take part in this 36-hole competition. Each contestant will play both courses. The hours for teeing off are from 7:30 a.m. to 2:00 p.m.

The sixty prizes, in the nine events, will be distributed after the banquet at the Cleveland Country Clubhouse at 7:00 p.m.

Officers of the A.M.G.A. for 1941 are Dr. D. H. Houston, Seattle, president; Dr. Harry E. Mock, Chicago, and Dr. James Craig Joyner, New York City, vice presidents; Bill Burns, Lansing, Mich., seecretary.

The Cleveland Golf Committee is composed of Dr. John B. Morgan, chairman, 1822 Republic Building; Dr. William J. Engel, Dr. Farrell T. Gallagher, and Dr. F. W. Merica.

All members of the A.M.A. are eligible for Fellowship in the A.M.G.A. Write the secretary, 2020 Olds Tower, Lansing, Michigan, for registration application.

Directory of Medical Specialists 1942 Edition

Specialists eligible for listing in the forthcoming second edition of the Directory of Medical Specialists are urged to fill in and return promptly the questionnaires for biographic data now being mailed out by the publication office.

This directory is the official publication of the Advisory Board for Medical Specialties, issued every two years, and listings are limited to those formally certified by any of the 15 American Boards examining in the medical specialties. There is no charge for such listings.

The second edition is now being prepared, and will be ready for distribution early in February 1942, with biographic, geographic, and alphabetic listings of all diplomates certified to January 1, 1942. It will include approximately 18,000 names.

The Directing Editor is Dr. Paul Titus, 1015 Highland Building, Pittsburgh, Pa., and the secretaries of the fifteen American Boards constitute the Editorial Board.

Annual Report of Committee on Public Relations and Economics

IT is impossible for the Committee on Public Relations and Economics to present at this time a final report on its activities since the last Annual Meeting due to the fact that the Ohio General Assembly is still in session. The committee will present a review of the final disposition of the approximately 100 health and medical bills introduced into the State Legislature this year in a supplemental report which will be submitted to the House of Delegates at its 1941 sessions, June 3 and 4, in Cleveland.

LEGISLATIVE ACTIVITIES TO DATE

Through its Sub-Committee on Legislation and with the assistance of local legislative committeemen throughout the state, the State Association carried on an active program prior to the General Election in November, 1940. Several hundred candidates for public administrative and legislative offices were interviewed and data compiled as to their attitude on medical and health matters and their qualifications in general. This information was disseminated in various ways to members of the State Association to guide them and to assist them in voting intelligently at the November election. This pre-election program was, in the opinion of your committee, of great value to the membership generally and resulted in the establishment of many friendly relationships between the medical profession and successful candidates. The Committee on Public Relations and Economics recommends that the House of Delegates cast a vote of appreciation to the members of the Sub-Committee on Legislation and to the legislative committeemen of the county medical societies, as well as to the members of the State Headquarters Office staff, for their diligent work last Fall and for their equally efficient activities during the present session of the General Assembly.

MEDICAL SERVICE PLANS

One of the most important undertakings of the Committee on Public Relations and Economics throughout the Summer and Fall of 1940 involved preparation of the proposed enabling act for medical service plans and the organization of a promotional program for such proposals. In conjunction with the members of the Committee on Medical Service Plans, this committee worked many week-ends last Fall drafting the proposal, which was later introduced into the Ohio General Assembly by Miss Margaret Mahoney, Cleveland, member of the House of Representatives, and given the number, House Bill 51.

Many conferences were held with the Superintendent of Insurance and his staff with respect to the text of the proposal. Legal counsel was employed to assist in the drafting. In addition an extensive educational and promotional program was organized and carried on effectively. Details on this promotional program will be found in the Annual Report of the Bureau of Public Education. After the introduction of House Bill 51, activities were taken over by the Sub-Committee on Legislation and local legislative committeemen. Information and arguments for the proposal were presented to the committees in the General Assembly by a special committee of the State Association consisting of Dr. Skipp, Dr. Paryzek, Dr. Smith, Dr. Hein; and Mr. Wayne E. Stichter, Toledo, legal counsel for the State Association. This committee attended many hearings at Columbus.

House Bill 51 was reported out of the Insurance Committee on March 18 and was passed by the House of Representatives on April 2 by an overwhelming vote of 110 to 8. As this report was prepared the bill was being given hearings by the Senate Insurance Committee preparatory to a vote by the Senate. Additional information regarding the history and progress of House Bill 51 will be covered in the supplemental report of this committee, referred to at the outset. Your committee desires, at this time, to congratulate the Committee on Medical Service Plans for its excellent work and its conscientious service, and to compliment and thank the many local legislative committeemen who did such a good job "back home" where votes are made.

N.Y.A. PROGRAM

During the early part of 1941 the Committee on Public Relations and Economics held a series of conferences with officials of the National Youth Administration in Ohio for the purpose of assisting the N.Y.A. in formulating basic policies for a health program among N.Y.A. youth in this state. A general policy was adopted by The Council, on recommendation of this committee, for the guidance of county medical societies. Information on this activity was published in the March, 1941, issue of *The Ohio State Medical Journal*, which article should be considered as a part of this report. By cooperating with the N.Y.A. on this matter, your committee believes that The Council of the State Association has demonstrated again that the medical profession of Ohio always is willing to take a constructive and helpful attitude on medical and health activities. In assisting in the adoption of sound policies to govern programs of this kind the State Association has placed the medical profession in a position where it can guide such activities and give them proper supervision.

WORKMEN'S COMPENSATION

Because of the strenuous legislative campaign and many problems which have arisen in connection with the operation of the Selective Service machinery, both of which have demanded much time and effort on the part of the officers of the State Association and the Executive Secretary, only one meeting of the Sub-Committee on Workmen's Compensation has been held. For that reason the committee, at present, has pending a number of very important questions which will be considered at an early meeting and a report prepared for The Council.

We are sorry to have to report that Dr. Sidney McCurdy, who became chief medical supervisor for the State Industrial Commission in 1936, resigned effective April 1. Under Dr. McCurdy's direction many improvements were made in administrative procedure of the Medical Division of the Commission, and your committee recommends that the House of Delegates at this time give him a vote of appreciation for the efficient manner in which he carried on his important responsibilities. Your committee believes that most of the medical problems which occur in connection with the administration of the Workmen's Compensation Act can be solved through a close relationship and frequent conferences between the Industrial Commission and the State Medical Association. At this time, therefore, your committee recommends that the House of Delegates reiterate its policy of offering to the Commission the active help and facilities of the State Medical Association to the end that problems which create confusion and misunderstanding may be eliminated.

MISCELLANEOUS

Among other matters considered by the committee and referred to in minutes of the meeting of The Council during the past year, or elsewhere, in *The Journal* were the following:

Approval of a plan evolved by the Ohio Public Health Council for the voluntary annual registration and approval of intrastate Federal, municipal, private and hospital laboratories by the State Department of Health for performance of serodiagnostic tests for syphilis.

Adoption of a closer relationship between the State Association and the State Medical Board on matters of prosecution of violators of the Medical Practice Act and with respect to obtaining more adequate appropriations for the Board.

Cooperation with the State Dental Society on questions of mutual interest.

Preliminary conferences on a question involving the equalization of remuneration received by physicians for taking care of recipients of state and Federal medical aid. (Resolution F, adopted by the House of Delegates at the May, 1940, Annual Meeting.) Additional conferences on this important matter have had to be delayed because of legislative activities, but will be arranged by the committee during the ensuing months.

Consideration of a proposed program of tuberculosis education in Ohio as proposed by the Ohio Branch of the American College of Chest Physicians. This proposal is now pending before the Sub-Committee on Public Health Education, which is under instructions to report its recommendations to this committee so that a final report may be prepared for submission to The Council.

Cooperation with the State Health Department, State Welfare Department, and various organizations on medical and health questions of mutual interest.

Barney J. Hein, M.D., Toledo, Chairman,
H. M. Platter, M.D., Columbus,
Ralph M. Watkins, M.D., Cleveland,
E. O. Swartz, M.D., Cincinnati,
O. J. Walker, M.D., Youngstown,
Wm. M. Skipp, M.D., Youngstown, ex-officio,
Harry V. Paryzek, M.D., Cleveland, ex-officio,
Parke G. Smith, M.D., Cincinnati, ex-officio.

Mid-Summer Examinations of Medical Board Scheduled for June 11-14

Mid-summer examinations of the State Medical Board will be held in Columbus, Wednesday through Saturday, June 11-14, the Board decided at a meeting in Columbus, April 1. The Board suspended the license to practice medicine and surgery of Dr. Martin L. Purdin, West Union, who was convicted of charges he violated the Harrison Narcotic Law. Dr. John M. Lee, Dayton, surrendered his license to practice medicine and surgery and requested its cancellation.

Licenses to practice medicine and surgery in Ohio were granted the following physicians through reciprocity with other states:

Max E. Baar, Canton, University of Georgia; Albert A. Bodaski, Youngstown, University of Minnesota; Carl E. Burkland, Youngstown, Johns Hopkins University; Virginia L. Congleton, Cincinnati, Johns Hopkins University; Morton Cutler, Cleveland, Northwestern University; Ralph H. Fuller, Cincinnati, University of Nebraska; Esther Handcock, Columbus, University of Colorado; Kenneth E. Higgins, Norwood, Indiana University; Frank L. Mikes, Cleveland, St. Louis University; Abbott C. Scott, Youngstown, Washington University; James A. Seligman, Ravenna, Hahnemann Medical College; Hugh Shane, Gallipolis, Tulane University of Louisiana; Thomas R. Shoupe, Findlay, University of Michigan; Isidore W. Towlen, Toledo, Detroit College of Medicine and Surgery; Frank Tropea, Jr., Ravenna, Hahnemann Medical College; Thomas A. Weaver, Cincinnati, University of Rochester; Henry L. Worley, Loveland, Hahnemann Medical College; Henry A. Mosher, Dayton, Northwestern University; Maurice J. Shargel, Cleveland, University of Michigan.

Annual Report of the Committee on Education

THE Committee on Education concentrated its efforts during the past year on the third course of the five-year postgraduate lecture program of the Ohio State Medical Association inaugurated in the Fall of 1937. Eleven hundred and eighty-four members of the Association attended one or more of the lectures during the Fall and Winter of 1940 in 10 regional centers. This represents one out of four members in the 86 counties which comprised the 10 regions.

In planning the 1940 course, the Committee on Education and its Sub-Committee on Regional Postgraduate Lectures carefully considered several suggestions submitted by local chairmen and members who had attended previous postgraduate meetings. Most of these suggestions were adopted and plans for the course changed accordingly. The number of regional centers was increased from five to ten, with fewer counties comprising each region. This revamped set-up made the lectures accessible to more members, and most members had a shorter distance to travel. The 1940 course consisted of three sessions, about a month apart, with four 45-minute talks at each meeting, two in the late afternoon and two in the evening. Arrangements were made so that all who attended could eat dinner together between the afternoon and evening sessions.

INTERESTING STATISTICS

After a survey of local facilities for the meetings, in cooperation with officers of the county medical societies, the committee selected ten regional centers, which are listed below, together with counties included in each region, the total attendance for the three meetings, individual physicians attending, and the average attendance:

Region A—Napoleon. Counties: Williams, Fulton, Lucas, Defiance, Henry, Wood, Paulding, Putnam, Hancock. Total attendance, 171; individual physicians attending, 109; average attendance at each session, 57.

Region B—Tiffin. Counties: Ottawa, Sandusky, Erie, Seneca, Huron, Wyandot, Crawford, Marion. Total attendance, 139; individual physicians attending, 80; average attendance at each session, 46.

Region C—Mansfield. Counties: Lorain, Medina, Ashland, Wayne, Richland, Morrow, Knox, Holmes, Coshocton. Total attendance, 269; individual physicians attending, 109; average attendance at each session, 90.

Region D—Warren. Counties: Lake, Ashtabula, Geauga, Trumbull, Summit, Portage, Mahoning, Stark, Columbiana. Total attendance, 232; individual physicians attending, 137; average attendance at each session, 77.

Region E—Cadiz. Counties: Tuscarawas, Carroll, Jefferson, Harrison, Guernsey, Belmont. Total attendance, 123; individual physicians attending, 74; average attendance at each session, 41.

Region F—Athens. Counties: Muskingum, Noble, Monroe, Washington, Morgan, Perry, Hocking, Athens, Vinton, Meigs. Total attendance, 124; individual physicians attending, 70; average attendance at each session, 41.

Region G—Columbus. Counties: Union, Delaware, Licking, Madison, Franklin, Fairfield, Fayette, Pickaway. Total attendance, 411; individual physicians attending, 268; average attendance at each session, 137.

Region H—Wapakoneta. Counties: Van Wert, Allen, Hardin, Mercer, Auglaize, Logan, Shelby, Darke, Miami, Champaign. Total attendance, 159; individual physicians attending, 96; average attendance at each session, 53.

Region I—Lebanon. Counties: Preble, Montgomery, Clark, Greene, Butler, Warren, Clinton, Clermont, Brown, Highland. Total attendance, 204; individual physicians attending, 111; average attendance at each session, 68.

Region J—Portsmouth. Counties: Ross, Pike, Jackson, Adams, Scioto, Lawrence, Gallia. Total attendance, 150; individual physicians attending, 75; average attendance at each session, 50.

Subjects presented in the 1940 course were:

1. The Child and His Heart.
2. Management of Heart Failure in the Home.
3. Meningitides in Children.
4. The Clinical Approach to the Positive Mantoux Test.
5. The Anemic Patient.
6. Practical Uses of Sulfanilamide and Its Derivatives.
7. Deficiencies and Anemia.
8. Modern Treatment of Pneumonia.
9. Emergency Treatment of Roadside Injuries.
10. Complications of the Common Cold.
11. Fractures and Pseudo-Fractures of the Spine.
12. Childhood Ear Infections: Proper Treatment To Prevent Deafness.

COMPLIMENT FOR SPEAKERS

The committee feels that it was most fortunate in the choice of lecturers for these subjects. Most of the speakers gave two lectures, one in the afternoon and one in the evening. They were for the most part physicians of wide clinical experience who had also proved their ability as speakers at medical meetings. Their selection was made from a list of suggested speakers submitted by members of the Committee on Education, the Sub-Committee on Regional Postgraduate Lectures, officers of the State Association and other members of the Association who were interested in having successful postgraduate programs. Most of the speakers performed in such a way as to substantiate the judgment of the committee in placing them on the program. They stressed diagnosis and treatment, and kept their talks on a practical plane. An innovation in this year's program was the comprehensive outlines of each talk, prepared by the individual speakers and distributed at the close of each meeting. A list of the 55 speakers who participated in the 1940 course follows. To them the committee wishes to express its sincere thanks. The medical profession of Ohio owes them a debt of gratitude for the personal sacrifice which they made in taking time from busy practices, without recompense, to keep their colleagues abreast of the advancement in scientific medicine.

Those who presented the lectures were: Doctors Sterling H. Ashmun, Dayton; Homer D. Cassel, Dayton; S. A. Hatfield, Columbus; H. M. Clodfelter, Columbus; Henry M. Goodyear, Cincinnati; Ralph G. Carothers, Cincinnati; Berman S. Dunham, Toledo; Myron D. Miller, Columbus; Ralph M. Watkins, Cleveland; J. M. Hayman, Jr., Cleveland; C. L. McKibben, Toledo; C. W. Engler, Cleveland; Albert L. Bershon, Toledo; Jas. G. Kramer, Akron; Russell L. Haden, Cleveland; Wallace S. Duncan, Cleveland; C. E. Kinney, Cleveland; Chas. T. Way, Cleveland; E. H. Baxter, Columbus; Robert F. Parker, Cleveland; Paul M. Moore, Jr., Cleveland; A. Carlton Ernstene, Cleveland; Charles A. Doan, Columbus; Judson D. Wilson, Columbus; John N. McCann, Youngstown; James H. Warren, Columbus; Fred W. Dixon, Cleveland; Edson J. Brown, Cleveland; Marion L. Ainsworth, Columbus; D. W. Heusinkveld, Cincinnati; Leon Schiff, Cincinnati; Albert F. Kuhl, Dayton; C. C. Sherburne, Columbus; James O. Beavis, Dayton; Joseph A. Freiberg, Cincinnati; John A. Toomey, Cleveland; Harry V. Paryzek, Cleveland; D. M. Glover, Cleveland; W. H. Evans, Youngstown; Morton Hamburger, Jr., Cincinnati; M. A. Blankenhorn, Cincinnati; Maurice A. Schnitker, Toledo; A. B. Brower, Dayton; K. V. Kitzmiller, Cincinnati; Louis R. Effler, Toledo; B. J. Hein, Toledo; Edward A. Wagner, Cincinnati; Phillip T. Knies, Columbus; B. K. Wiseman, Columbus; John W. Means, Columbus; Russel G. Means, Columbus; Bernard Schwartz, Cincinnati; Barbara Ann Hewell, Cincinnati; Frank E. Stevenson, Cincinnati; Edward King, Cincinnati.

Local arrangements for the Third Course of regional postgraduate lectures was much more complicated than in previous years, principally because of the necessity of providing dinner facilities between the afternoon and evening sessions. The reminder notices which were sent out to members from the State Headquarters Office approximately weekly prior to each of the meetings included a return card to be mailed to the local chairman by those who expected to be at the dinner. This gave the local chairman some idea about how many dinner reservations to make. Occasionally sleet storms or other unanticipated events upset their prognostications, but in general the plan worked out satisfactorily. The dinner sessions proved to be very much worthwhile from an organization standpoint. Short addresses were made during the dinner hour in practically all of the regions by members of the Sub-Committee on Legislation, the Committee on Medical Service Plans, and the Committee on Medical Preparedness. Dr. Wm. M. Skipp, Youngstown, President of the State Association, spoke at one dinner session in nine of the ten regions. The effect of these various talks was to stimulate interest in the activities of the Association.

LOCAL CHAIRMEN DID GOOD JOB

The committee wishes to commend the local chairmen and host county society officers for their excellent work in providing proper facilities for the meetings. Arranging for proper meeting places, dinner reservations, lanterns, and other equipment for the lecturers, was no easy task. The local chairmen followed through with their responsibilities conscientiously and efficiently. Much of the credit for the success of the meetings properly belongs to these chairmen: Dr. J. R. Bolles, Napoleon; Dr. E. H. Porter, Tiffin; Dr. N. E. Williard, Tiffin; Dr. Mabel Emery, Mansfield; Dr. Paul C. Gauchat, Warren; Dr. F. Foster Dye, Cadiz; Dr. John R. Sprague, Athens; Dr. Link M. Murphy, Columbus; Dr. Chas. C. Berlin, Wapakoneta; Dr. N. A. Hamilton, Franklin; Dr. James H. Arnold, Lebanon; and Dr. Ross M. Gault, Portsmouth.

The committee is somewhat concerned about one result of the regional postgraduate lectures, and that is the tendency of some county societies to discontinue their regular meetings during the months that the postgraduate lectures are being presented. If this practice were general in all societies, it would seriously affect organization activities and hinder the machinery of the State Association in the dissemination of important information through the medium of county society meetings.

This brings up the subject of "too many meetings"—a topic not infrequently discussed by medical men. Analysis of attendance at the postgraduate lectures shows that their presentation in the metropolitan areas is not advisable. Physicians in the larger cities, with weekly academy meetings, hospital staff meetings and local postgraduate programs can hardly be criticized for being somewhat apathetic to these additional meetings. In general, attendance from the rural and semi-rural areas, where the opportunities for postgraduate talks are not so great, has been quite good.

COURSE THIS YEAR UNCERTAIN

Plans for the 1941 series of regional postgraduate lectures, the fourth in the five-year course, are necessarily being held in abeyance. When The Council of the State Association decided last December to waive state dues to members who are called into military service, and thus reduce the income of the Association, the budget of the Association was curtailed accordingly. A number of items, including the appropriation for the activities of the Committee on Education, were reduced, so that the regional postgraduate lectures this Fall will probably have to be less extensive than in previous years. Another factor which makes the committee hesitate to predict next Fall's program is World War II—and the possible involvement of this country. However, members of the State Association can be assured that the committee still feels that "the background of medical practice is continuous medical education", and that in so far as the finances of the State Association and the unpredictable international situation will permit, it is hopeful that some type of postgraduate instruction will be made available to the medical profession of Ohio next Fall.

In concluding this report, the Committee on Education wishes to express its appreciation to the following members of the Sub-Committee on Regional Postgraduate Lectures, for their assistance in the postgraduate program: Dr. James M. Pierce, Cincinnati; Dr. Cecil Striker, Cincinnati; Dr. Louis N. Jentgen, Columbus; Dr. R. O. Egeberg, Cleveland; Dr. H. M. Clodfelter, Columbus; Dr. John Noll, Youngstown; Dr. C. L. Barrett, Bellefontaine; Dr. D. J. Kindel, Cincinnati.

Clyde L. Cummer, M.D., Cleveland, Chmn.,
J. L. Webb, M.D., Nelsonville,
S. H. Ashmun, M.D., Dayton,
Carl A. Wilzbach, M.D., Cincinnati,
Russel G. Means, M.D., Columbus.

P-G Courses in Obstetrics

The Illinois State Department of Public Health and the Children's Bureau, U.S. Department of Labor, are sponsoring ten 4-weeks courses in obstetrics at the Chicago Lying-in Hospital during the fiscal year 1941-1942. Only a limited number of physicians will be accepted for each course. The only cost to the individual is for room and board and $25.00 ($10.00 of which is refunded at the completion of the course). Applications and inquiries should be addressed to: Postgraduate Course, Department of Obstetrics and Gynecology, 5848 Drexel Avenue, Chicago, Illinois.

Ohio Student Health Association Holds Session in Columbus, April 4

The Seventeenth Annual Meeting of the Ohio Student Health Association, a section of the American Student Health Association, was held at the Deshler-Wallick Hotel, Friday, April 4. The following papers were presented at the morning session: "Hypertension in the Young Adult of College Age", Dr. Edward M. Chester, Baldwin-Wallace College, Berea; "Low Back Pain and Its Treatment", Dr. Judson D. Wilson, Columbus; "Common Skin Diseases of the College Age Group", Dr. Burton F. Barney, Columbus. The luncheon period was devoted to a discussion of progress in the American Student Health Association. Speakers were: Dr. R. W. Bradshaw, Oberlin College, Oberlin, "Eye Health Committee"; Dr. E. Herndon Hudson, Ohio University, Athens, "Tuberculosis Committee"; Dr. George T. Blydenburgh, Ohio Wesleyan University, Delaware, "Hearing Impairment in College Students". The afternoon session was opened with an address by Dr. Ruth E. Boynton, University of Minnesota, President of the American Student Health Association. Dr. Harrison S. Evans, Columbus, spoke on "Emotional Problems of College Students", and Dr. John W. Wilce, Ohio State University, Columbus, discussed "Aviation Medicine, A Defense Challenge".

Officers of the Ohio Student Health Association are: Dr. John M. McCleery, Muskingum College, New Concord, president; Dr. Edwin Riemenschneider, Baldwin-Wallace College, Berea, vice-president; Dr. George T. Blydenburgh, Ohio Wesleyan University, Delaware, secretary-treasurer.

Dr. George F. Zinninger Honored

In recognition of 50 years in the practice of medicine, Dr. George F. Zinninger was guest of honor at a recent banquet of the Canton Academy of Medicine. Over 100 members and guests attended. Dr. R. K. Ramsayer, acting as master of ceremonies, presented to Dr. Zinninger a booklet containing the signatures of all those present. Among the guests were a son, Dr. Max M. Zinninger, Cincinnati, and a daughter, Dr. Pauline Zinninger, Canton.

St. Louis Alumni Dinner

The Annual Banquet of the St. Louis Medical Alumni Association will be held in Cleveland, Wednesday evening, June 4, during the American Medical Association convention. Tickets are $3 per person. The banquet will be at the Hotel Statler, beginning at 7:30 P.M. Reservations may be made according to instructions contained in a letter sent to each alumnus, or tickets may be procured at the St. Louis desk at the Cleveland Public Auditorium, headquarters for the convention.

Annual Report of Judicial and Professional Relations Committee

NO questions of major importance were referred to the Judicial and Professional Relations Committee during the past year. However, the committee did review for The Council a number of matters involving amendments to the constitution and by-laws of several county medical societies and submitted recommendations on them to The Council.

In this connection the committee would like to suggest to all county medical societies that they establish a closer relationship with the Judicial and Professional Relations Committee, especially on questions pertaining to proposed amendments to local constitutions and by-laws.

Members of the Judicial and Professional Relations Committee have had enough experience on constitutional matters to be in a position to be helpful to local committees assigned the responsibility of revising or recodifying the constitution and by-laws of a local medical society. It is felt that it might be wise for local committees to submit suggested changes in a local constitution and by-laws to the Judicial and Professional Relations Committee for study prior to the time such proposed changes are submitted to the local society for official action. If this is done, the Judicial and Professional Relations Committee may be able to be of assistance on matters of policy and wording.

DELAYS COULD BE AVOIDED

There have been one or two instances where The Council, on recommendation of this committee, has refused to approve proposed changes in a local constitution and by-laws because of loose wording or conflict with the constitution and by-laws of the State Association. In these cases, the original amendments have had to be revised and the revised amendments re-submitted to the local society for action. Obviously, this has caused delay and additional work on the part of the local revision committee. Considerable confusion could be eliminated if proposed amendments are submitted to the Judicial and Professional Relations Committee for preliminary review prior to official action by the local society, as pointed out above. After the society has acted, then the amendments can be submitted to The Council officially and, because of the preliminary work, prompt action by the State Association can be taken.

PREVIOUS REPORT CITED

Attention is called to a report by the Judicial and Professional Relations Committee, adopted by The Council at its meeting on February 16, as published in the minutes of that meeting in the March, 1941, issue of *The Ohio State Medical Journal*. That report read as follows:

"Pursuant to action of The Council on May 13, 1941, the Judicial and Professional Relations Committee has given consideration to the possibility of amending the Constitution and By-Laws of the Ohio State Medical Association in such a way that physicians engaged in certain governmental services or in teaching positions in Ohio, but who do not hold a license to practice medicine and surgery in Ohio, would be eligible to membership in the Ohio State Medical Association in the same manner as licensed physicians engaged in active practice.

"By unanimous vote the committee recommends to The Council that action on this question be deferred. The reason for this recommendation is that the House of Delegates of the American Medical Association at the 1940 Annual Session of the A.M.A. last June adopted a recommendation of the Reference Committee on Amendments to the Constitution and By-Laws of the A.M.A. authorizing the Judicial Council of the A.M.A. to submit to the House of Delegates of the A.M.A. at the 1941 Annual Session clarifying provisions relating to eligibility to membership in the national society.

"It is the belief of the Judicial and Professional Relations Committee that it would be unwise for the Ohio State Medical Association to take any action on this question until after the House of Delegates of the American Medical Association has acted, inasmuch as any action which would be taken by this Association would necessarily have to conform to changes which may be made in the Constitution and By-Laws of the parent organization, namely: the A.M.A."

One other question, considered by the committee recently, pertained to amendments which might be adopted by local medical societies waiving local dues for members entering active military service. General suggestions for the guidance of local medical societies were drafted by the committee. The principal point emphasized was that any amendment adopted by a local medical society on this question should be worded so as to protect the membership status of a physician granted waiver of dues.

James G. Kramer, M.D., Akron, Chairman,
G. A. Woodhouse, M.D., Pleasant Hill,
J. E. Tuckerman, M.D., Cleveland,
Howard D. Fabing, M.D., Cincinnati,
Phillip T. Knies, M.D., Columbus.

Report of the Committee on Medical Preparedness

SINCE the early Fall of 1940, the rseponsibility for coordinating the medical personnel and resources of Ohio for the part which the medical profession is taking in the National Defense Program has been handled by the Committee on Medical Preparedness, created for this particular purpose by action of The Council.

The committee consists of the President-Elect and 11 additional members, each representing a Councilor District. Shortly after the committee was organized, with the approval of The Council, it requested each county medical society to establish a similar local preparedness committee. This was done in each county and much of the credit for what the main committee has accomplished should be given to the local preparedness chairmen and their respective committeemen. These local committees have been most efficient in carrying on the assignments and responsibilities imposed upon them and all of them have devoted much time and energy to the important work which they have been called upon to perform.

COOPERATION WITH A.M.A.

One of the first and most important responsibilities undertaken by the Committee on Medical Preparedness was to actively cooperate with the Committee on Medical Preparedness of the American Medical Association in obtaining the return of the preparedness questionnaires distributed by the A.M.A. to approximately 9,300 physicians residing in Ohio. Up to the present time approximately 95 per cent of all physicians residing in this state have returned their questionnaires to A.M.A. headquarters at Chicago. This good showing on the part of Ohio was brought about through personal solicitation by members of local preparedness committees, direct mail appeals, and special articles carried in *The Ohio State Medical Journal.* The purpose of the questionnaire was to provide the American Medical Association with data on the qualifications of each member of the medical profession so he could be assigned to military or civilian activities for which he is best fitted in event of a national emergency. Information which has been collected through this source is being made available to the War Department and, of course, will be valuable in event of war in making the proper distribution of physicians to insure adequate medical service for workers in war industries and the civilian population generally.

As this report was being prepared, the Committee on Medical Preparedness was requested by the American Medical Association to assist it on two other surveys, namely: A survey of various communities for the purpose of ascertaining the number of physicians necessary in such communities to care for the civilian population; and assistance in the assembling of detailed information on physicians qualified and available for industrial practice, primarily in the war industries.

STATE SELECTIVE SERVICE

Last Fall shortly after the enactment of the Selective Service Act, Governor Bricker officially requested the cooperation and assistance of the Ohio State Medical Association on the matter of the appointment of medical examiners for local draft boards and the appointment of members of the district medical advisory boards.

Local preparedness committees were immediately requested to suggest the names of physicians willing to serve as medical examiners for the 330 local draft boards in Ohio, and to cooperate with the State Association's committee in making recommendations for the district medical advisory boards. Because of the prompt and efficient work of the local preparedness committees, between 800 and 900 physicians had been listed and their names forwarded to the Governor by the time the Selective Service machinery started to operate in Ohio. The original list has been augmented considerably since last Fall so that now close to 1,500 Ohio physicians are serving in a voluntary capacity, without recompense, as examiners of registrants under the Selective Service Act or as members of medical advisory boards.

COMMENDATION FOR EXAMINERS

This patriotic service should not go unrecognized and, at this time, the Committee on Medical Preparedness recommends that the House of Delegates extend to all physicians who have given so freely of their time and services in connection with the Selective Service program a vote of sincere appreciation. It may be said once again that the medical profession never has shirked its responsibilities in times of emergency and distress.

Problems in connection with the medical phases of the Selective Service program in Ohio have been kept at a minimum because of the fine cooperative relationship which exists between the Committee on Medical Preparedness of the State Association and the Medical Division of State Selective Service Headquarters, headed by Lt. Col. Howard E. Boucher, M.D., and his assistant, Major Claude S. Perry, M.D., the latter as a member of this committee. Many questions have been discussed by Colonel Boucher with this committee and mutually acceptable efforts made to work out the problems and controversies which have arisen. Also, the Medical Division of Selective Service Headquarters has at all times solicited the recommendations of this committee and of local medical preparedness committees in making changes in or additions to the list of medical examiners. Coordination of this phase of the Selective Service program has played a big part in making the program in this state function efficiently and effectively.

INDUCTION STATIONS

At the request of Col. W. L. Pyles, M.D., Corps Area Surgeon, Fifth Corps Area, Fort Hayes, Columbus, Ohio, the Committee on Medical Preparedness, assisted by local preparedness committees, has provided a sufficient number of physicians to assist in physical examinations at the various induction stations in Ohio.

At the present time there are approximately 450 Ohio medical reserve officers on active duty with the armed forces, further evidence of the patriotism of the medical profession. The committee has maintained a close relationship with Major Frank J. Vokoun, M.D., Instructor, Medical Corps, Ohio Military Area, officer in charge of selection and assignment of medical reserve officers for the Ohio Area. Efforts have been made by the committee to provide Major Vokoun with data on the various medical reserve officers, especially as to their qualifications for chiefs-of-service in various base hospitals. Also, the committee has furnished proper information, in some cases, to protect sparsely settled communities from being deprived of adequate medical personnel and facilities which might have occurred had physicians been called into active service indiscriminately.

LETTER OF APPRECIATION

Evidence that the War Department appreciates the cooperation which has been given by the State Medical Association is found in the following letter received by the chairman of this committee from Major Vokoun:

"I wish you would convey to your committee my sincere gratitude for the manner in which they have cooperated with our headquarters during the past year. It has been a real pleasure to have been associated with you in our common effort to further the National Defense."

The ever-changing international situation indicates that even bigger problems and responsibilities will confront the State Medical Association during the ensuing months. Therefore, it is most essential that medical preparedness committees be maintained on an active basis in all counties and by the State Association. One question which must be given immediate attention is that with respect to the deferment of medical students. There must be no interruption in medical education. Efforts to try to meet this serious problem in Ohio are now under consideration by this committee and we are hopeful that methods which have been discussed will be adopted to insure against a deficiency in the annual supply of physicians, which of course would have a disastrous effect on the health and welfare of the citizens of Ohio.

In event of any important developments during the next 30 days, this committee will present a supplemental report to the House of Delegates when it meets in Cleveland the week of June 1.

Harry V. Paryzek, M.D., Cleveland, Chmn.,
Robert Conard, M.D., Wilmington,
Thomas P. Sharkey, M.D., Dayton,
Roland H. Good, M.D., Van Wert,
C. I. Kuntz, M.D., Fremont,
James N. Wychgel, M.D., Cleveland,
H. H. Musser, M.D., Akron,
Carl A. Lincke, M.D., Carrollton,
Edmund R. Brush, M.D., Zanesville,
George G. Hunter, M.D., Ironton,
Claude S. Perry, M.D., Columbus,
Charles R. Keller, M.D., Mansfield.

Problems of Nutrition Are Studied at Regional Institutes Throughout State

Problems of adequate nutrition as related to the national defense program have been scheduled for careful consideration at seven regional Institutes of Nutrition for Defense in Ohio. First of these meetings was held April 21 in Columbus under the chairmanship of Dr. Jonathan Forman, editor of *The Journal.* Others yet to be held are: Bowling Green, May 2; Cleveland, May 3; Bellefontaine, May 6; Dayton, May 14; Athens, May 15; and Youngstown, at a date to be set.

Two hundred physicians, dentists, nutritionists, educators, and others interested in the problem of nutrition attended the Columbus session. Dr. Forman read a paper on "How Can We Recognize Malnutrition in the Absence of Disease?" and Miss Martha Koehne, Ph.D., nutritionist in the State Department of Health, discussed "Better Food for Less Money." Miss Minnie Price, chairman of the Ohio Nutrition Defense Committee, sponsoring agency, discussed nutrition in Ohio in wartime.

Roundtables were held on the following topics: food, teeth, and health; improving nutrition of school children; better nutrition through home-produced foods; the defense worker and better use of the food dollar; and information on nutrition. Evening session speakers were Miss Marjorie Vaughan, of the Federal Security Agency, and H. C. Ramsower, of the Ohio State University Extension Service.

Also under the auspices of the Ohio Nutrition Defense Committee, which sponsored the regional meetings, a three-day conference on nutrition problems will be held at Ohio State University June 17 through 19. Physicians, dentists, nurses, and nutritionists are invited to attend this meeting, at which a more technical approach to the subject will be used.

Report of the Bureau of Public Education

"KEEPING the public informed about medicine and the medical profession" remained the goal of the Bureau of Public Education throughout the second year of its existence. Because this activity of the State Headquarters Office was begun in June, 1939, this report will be the first to embrace a full year of the program. During the past 12 months the policy of keeping this program elastic enough to be adapted to any set of circumstances which might arise was adhered to as it was at the outset of the enterprise.

The channels through which such a program of public education can be carried out fall into rather well defined classifications—i.e., press relations, radio, pamphlets, exhibits, the speaker's platform, etc. These will be discussed individually for the sake of facility. It should be noted, however, that the efforts of the Bureau in behalf of House Bill 51, the proposed enabling act for medical service plans, which perhaps represent the major activity of the Bureau during the latter half of the year, cut across all these fields and must, therefore, be reported under each section.

PRESS KEPT INFORMED

Press Relations: The press relations policy which proved so successful during the first months of the Bureau's program was continued last year. A state-wide news release system was perfected and kept constantly up to date, so that news stories prepared and distributed by the Bureau were sent to the city editor of every daily newspaper and the editor or publisher of every weekly or bi-weekly in the state. They were also sent to managers of wire service or press association bureaus, health columnists, and other interested journalists.

Releases were not sent out at regular intervals but only when there was a story of actual news value. This policy has paid dividends, for editors now realize that when a story comes to them on the distinctive news release form of the Bureau of Public Education, they may accept that story as newsworthy and authoritative. The following topics were subjects of state-wide releases during the past year: The Annual Meeting in Cincinnati (3 releases); Ohio physicians participating in the A.M.A. meeting; fireworks injuries, (based on an editorial in *The Journal*); adequate diet at low cost; the Medical Preparedness program in Ohio; poliomyelitis, (based on a paper in *The Journal*); the Regional Postgraduate Lecture Course, (10 regional releases); tularemia; the relationship of housing to pneumonia incidence (based on a paper in *The Journal*); personnel and activities of Medical Preparedness committees; the A.M.A. Medical Preparedness Survey; the introduction of House Bill 51; cancer (in cooperation with the Women's Field Army).

ANNUAL MEETING PUBLICITY

The Annual Meeting was publicized intensely on the theory that the public wants to know what its physicians do at their educational and scientific gatherings. Besides the "advance stories" sent to all papers in the state, special material was prepared for reporters from the Cincinnati newspapers and wire service bureaus, and the Director of the Bureau worked closely with them throughout the meeting.

In addition to the general releases listed above, the Bureau either prepared or cooperated in the preparation of innumerable other articles for the press. Reporters working on timely features—the influenza epidemic, for example—were given factual and statistical material and other assistance. A writer for the Associated Press was assisted in preparing a series of informative articles on House Bill 51 prior to its introduction, and later legislative correspondents, feature writers, columnists, and editorial writers have received similar help.

It is apparent from the foregoing that the press relations program of the Bureau is closely coordinated with other projects of the State Headquarters Office. Much of it is concerned with such activities as the Medical Preparedness program, the Annual Meeting, the Regional Postgraduate Lectures, and other affairs of the State Association which are semi-public in character and therefore of news interest.

SERIES BEING PREPARED

At the present the Bureau has in preparation a series of newspaper articles which will shortly be available to county medical societies for insertion in local newspapers. These articles will deal with the public-interest activities of the physician through his membership in medical organization. They will not, therefore, be in the "spot news" or "health education" category, but will be "public information" features to be offered by local physicians to editors who wish to place such information before their readers. This project was undertaken in response to several requests for material of this sort.

During the past year more than 7,000 individual pieces of copy have been provided for the press of Ohio by the Bureau of Public Education. While this number may not seem large in comparison to some "flood-type" press relations programs, results bear out the policy of sending out releases only when there is a good story to tell. As many as 350 of Ohio's 425 newspapers have printed some of the releases, and this return is said to be as high as that achieved by any other publicity program in the state. These figures are proof of the statement that "editors want medical news".

MEDICAL NEWS ON THE AIR

Radio: In the field of public education via radio the Bureau performed three types of service last year: It prepared scripts for special-occasion broadcasts; it attempted to stimulate interest in sound medical and health radio programs; and it served as a "clearing house" for scripts of programs presented in the past which may be borrowed by county medical societies for use in preparing educational programs.

Although it is considered impractical for the Bureau to prepare a regular series of scripts for radio programs, chiefly because widely varying local conditions would limit their adaptability, it does so whenever an occasion warrants it. For example, arrangements were made with five radio stations in Cincinnati to present a number of educational programs during the Annual Meeting. Thirteen such broadcasts were given in the three days of the meeting, using physicians who appeared on the program as speakers. Most of these were the interview type, and scripts for them were prepared by the Bureau and based on factual statements submitted by the speakers themselves.

Six different scripts discussing House Bill 51—straight talks, interviews, and panel discussions—were prepared by the Bureau and presented over 23 different Ohio stations through cooperation with the officers of local county medical societies.

Certain other special programs were written during the year, such as interviews discussing the Medical Preparedness program in Ohio and the functions and activities of the Ohio State Medical Association. On several occasions the Director of the Bureau cooperated with officers of local county societies in script preparation.

SCRIPTS AVAILABLE

All these scripts, together with a large number of others for medical and health education, are indexed and filed in the Bureau and are loaned to county societies which wish to adapt them for local broadcasts. This script-loan service was available to any medical society which sponsored a local radio program.

The Bureau attempted also to stimulate interest in the series sponsored by the American Medical Association entitled "Doctors At Work" and broadcast over the network of the National Broadcasting Co. Letters describing and endorsing the series were sent to program managers of Ohio stations to which it was available.

News commentators of all Ohio radio stations regularly receive the news releases distributed by the Bureau, and they use them frequently in their news broadcasts.

The Director of the Bureau serves as a member of the Advisory Panel on Public Service Programs for the National Broadcasting Co. and thus has an opportunity to comment on and criticize the educational programs of one of the nation's major networks. This contact is valuable in helping to shape the Association's program of radio education and will undoubtedly prove more valuable as the program is expanded.

PAMPHLETS AND FOLDERS

Pamphlets: Literature explaining the purposes of House Bill 51 was distributed by the Bureau in pamphlet form. First pamphlet published was a yellow six-page leaflet entitled "Why Ohio Needs An Enabling Act For Medical Service Plans." This was mailed to all members of the Association in September. Similar material was contained in a blue pamphlet prepared for lay readers in October, entitled "Toward Better Health." After the bill was introduced in January, this blue pamphlet was revised and brought up to date and printed on green paper. Sixty thousand copies of this folder were distributed to laymen throughout Ohio by officers of county medical societies and their auxiliaries. More than 75,000 pamphlets on H.B. 51 were distributed during the educational campaign.

A "handbook" on the proposed Enabling Act—a 16-page pamplet containing pertinent information about it and the text of the bill—was also prepared by the Bureau in collaboration with officers and committees of the Association. This was used principally by legislative committee members in their personal contacts on behalf of the measure. Consequently only 1,000 of the handbooks were printed.

SPEAKERS MADE AVAILABLE

Speaker's Platform: A speaker's bureau service is maintained by the State Headquarters Office, and the portion of it for lay groups functions through the Bureau. Frequent requests for physicians to address noontide clubs, civic organizations, high school assemblies, and similar gatherings are received from points throughout the state, and these are filled from a list of 500 names maintained in the Bureau office. These names were obtained originally from county society officials and from records of individual physicians' past experience.

A similar speaker service on scientific subjects is maintained in the State Office, and county and district societies frequently utilize this facility in preparing scientific programs.

Approximately 75 requests for speakers on medical and health subjects before lay groups were filled last year, and as this service becomes wider known, it is more frequently taken advantage of. The largest group of requests came from the Women's Field Army of the American Society for Control of Cancer, which utilizes this service to obtain speakers on cancer control. Experience during the past year has shown that the Bureau is the most logical agency in the state to serve as a "clearing house" for speaker engagements of this type and is therefore in an excellent position to cooperate with county medical societies and to augment the work of those which maintain local speakers' bureaus.

DATA ALSO ON FILE

In connection with this activity the Bureau maintains a subject file of factual literature on medical and health topics of interest to laymen. This constantly growing file now contains 110 subjects, under each of which only scientifically authoritative material is filed. This material is sent to laymen and physicians alike on a "loan packet" basis. Physicians find it invaluable in preparing talks for lay groups, for it helps them to keep the layman's point of view in mind and to anticipate his questions. During the past year loan packets from this file were sent to high school and college students writing term papers, women's club members arranging discussions, debate team members, panel discussants, and newspaper reporters.

Exhibits: Outstanding among the exhibits planned and staged by the Bureau last year was the annual booth at the Ohio State Fair, August 24-30. Classified as a "health quiz corner", this exhibit was based on the present popularity of the quiz program. It offered Fair visitors an opportunity to test their own knowledge of health and medicine by filling out a questionnaire of the multiple-choice-answer type. Four senior medical students in white uniforms were in attendance at the booth to check the answers. Each person who took the quiz received his corrected questionnaire and a small booklet containing the right answers with an explanation of each.

EXHIBIT A BIG SUCCESS

This project proved eminently successful, as evidenced by the fact that 13,000 persons took the quiz during the week, or an average of three a minute. After the Fair closed, many requests for the questionnaire and answer sheet were received from school teachers, schoolmasters, etc., and about 2,000 were mailed out in response to those queries. The "health quiz" attracted widespread attention and was described in several national magazines.

At the Annual Meeting in Cincinnati an exhibit consisting of six large photomontage murals was erected by the Bureau to depict graphically the functions and services of the State Headquarters Office and the committees of the State Association. This occasioned considerable comment among the delegates and visitors to the meeting.

The Bureau also erected an exhibit booth to depict the State Association's interest in health education at the Annual Conference of Social Workers held in Columbus in October. From this booth the explanatory pamphlets on House Bill 51 were distributed.

A similar exhibit was staged at the Ohio Valley Conference on Education and Defense, held in Columbus in February, and at this meeting two photomontage murals on Medical Preparedness in Ohio and House Bill 51 were added. The panel on Preparedness was subsequently exhibited at a meeting of the Columbus Business and Professional Women's Club.

OTHER ACTIVITIES

Miscellaneous: Outside the above rather well-defined classification fell many of the Bureau's services and activities, both tangible and intangible. For example, the Bureau's Director attends conferences and meetings at which health and medical problems are likely to play an important role. Among these last year were the meetings at which exhibits were erected, the state meeting of officials of the Women's Field Army, the Ohio Follow-Up of the White House Conference on Children in a Democracy, and others. He also attended the annual Institute on Health Education, held in Detroit in October, where an item of interest was a seminar on "The Role of the Medical Society in Health Education."

Careful observance of comments on medical public relations in a large number of periodicals, correspondence with medical society officials in other states for an interchange of ideas, and many personal contacts and relationships with officials of other Ohio organizations in Columbus all constitute an important part of the Bureau's program.

Whenever anything in the field of health education has arisen, the Bureau has worked in close cooperation with Dr. Carl Wilzbach, of Cincinnati, chairman of the Association's Sub-Committee on Public Health Education. Emphasizing the thesis that sound health education must come from the medical profession, the Bureau has striven to serve, not as a health education agency per se, but rather as a coordinating or clearing agency, directing queries and requests to the right source within the profession.

The Bureau of Public Education, as the past year has proved, cannot function as an office or agency separate from the rest of the State Association. It is an integral and interdependent part of the organization, and the success of its undertakings depends on the degree of cooperation it enjoys. For this reason this report would not be complete without a reference to the splendid help and encouragement received from the President, President-Elect, Past-President, Committee on Public Relations and Economics, and other committees and officials of the Association. Strengthening support and help has also been generously and cheerfully given by the Executive Secretary, the Assistant Executive Secretary, the Editor of *The Journal*, and members of the office staff. Without this assistance and cooperation, any attempts to carry out a successful program of public education would have been futile.

Richard A. Aszling, Director,
Bureau of Public Education.

Coming Meetings

American Medical Association, Cleveland, June 2-6.

House of Delegates, Ohio State Medical Association, Cleveland, June 3-4.

American Association of the History of Medicine, Atlantic City, May 4-6.

American Association for Thoracic Surgery, Toronto, June 9-11.

American Association for the Study of Goiter, Boston, May 12-14.

American Association for the Surgery of Trauma, Montreal and Montibello, Canada, May 29-31.

American Association of Genito-Urinary Surgeons, Hot Springs, Va., May 29-31.

American Association of Industrial Physicians and Surgeons, Pittsburgh, May 5-9.

American Association of Medical Milk Commissions, Cleveland, June 1-2.

American Broncho-Esophagological Association, Cleveland, June 3.

American College of Chest Physicians, Cleveland, May 31-June 2.

American College of Physical Therapy, Washington, D.C., Sept. 1-5.

American Gastro-Enterological Association, Atlantic City, May 5-6.

American Heart Association, Cleveland, May 30-31.

American Laryngological Association, Atlantic City, May 28-30.

American Medical Women's Association, Cleveland, June 1-3.

American Neurological Association, Atlantic City, June 9-11.

American Ophthalmological Society, Hot Springs, Va., May 29-June 1.

American Orthopedic Association, Toronto, June 9-11.

American Otological Society, Atlantic City, May 26-28.

American Proctologic Society, Cleveland, June 1-3.

American Psychiatric Association, Richmond, Va., May 5-9.

American Radium Society, Cleveland, June 2-3.

American Rheumatism Association, Cleveland, June 2.

American Roentgen Ray Society, Cincinnati, Sept. 23-26.

American Society for Clinical Investigation, Atlantic City, May 5.

American Society of Clinical Pathologists, Cleveland, May 30-June 1.

American Society for the Study of Allergy, Cleveland, June 2-3.

American Therapeutic Society, Cleveland, May 30-31.

American Urological Association, Colorado Springs, May 19-22.

Association of American Physicians, Atlantic City, May 6-7.

Association for the Study of Internal Secretions, Atlantic City, May 2-3.

Society for the Study of Asthma and Allied Conditions, Atlantic City, May 3.

Association for Research in Ophthalmology, Cleveland, June 3.

National Gastroenterological Association, New York, May 13-16.

National Tuberculosis Association, San Antonio, Texas, May 5-8.

Harvard Alumni Reunion

The Harvard Medical Alumni Association, of which Dr. Leslie L. Bigelow, Columbus, is president, is having its annual banquet at the Hermit Club, Cleveland, 7 o'clock, Wednesday evening, June 4, during the week of the American Medical Association annual session. The principal speakers will be Dean Charles S. Burwell, who is to talk on "Harvard Medical School Today", and Dr. Philip D. Wilson, chief of staff of the Hospital for Ruptured and Crippled, New York City, recently returned from several months' work in England, who will tell of some of his medical adventures there. Guests will include Dr. Frank H. Lahey, Boston, President-Elect of the American Medical Association and Dr. Roger I. Lee, Boston, a Trustee of the A.M.A.

Dayton—Dr. Walter M. Simpson, director of the Kettering Institute for Medical Research and the diagnostic laboratories at Miami Valley Hospital, has been appointed a lecturer in medicine at Ohio State University College of Medicine.

ANNUAL AUDIT OF BOOKS OF THE OHIO STATE MEDICAL ASSOCIATION AND THE OHIO STATE MEDICAL JOURNAL FOR YEAR ENDED DECEMBER 31, 1940, BY KELLER, KIRSCHNER, MARTIN AND CLINGER, CERTIFIED PUBLIC ACCOUNTANTS, COLUMBUS, OHIO

THE ASSOCIATION

EXHIBIT A—Statement of Cash Receipts and Disbursements for the year ended December 31, 1940.

Cash on deposit January 1, 1940		$ 1,714.21
United States Treasury Bonds		70,000.00
Total cash and bonds at Jan. 1, 1940		$ 71,714.21
RECEIPTS		
Membership dues 1940:		
6.383 at $7.00	$44,681.00	
27 at $5.00	135.00	
65 at $3.00	195.00	
Total 1940 memberships	$45,011.00	
Less dues not transferred from Executive-Secretary's account	10.00	
1940 dues transferred in 1940	$45,001.00	
1939 dues transferred in 1940	1.00	
Total membership dues	$45,002.00	
Other receipts:		
Certificate of deposit cashed	10,000.00	
Interest on U. S. Treasury bonds	2,306.31	
Interest on certificate of deposit	25.00	
Annual meeting receipts	4,580.00	
Total receipts		61,913.31
Total to be accounted for		$133,627.52

DISBURSEMENTS

Ohio State Medical Journal		$ 10,000.00
Executive Secretary—salary		6,000.00
Executive Secretary—expense		655.45
Asst. Executive Secretary—salary		4,600.00
Asst. Executive Secretary—expense		461.58
President's expense		580.50
Treasurer's salary		300.00
Council expense		770.61
Payment of loan obtained in 1939		5,000.00
Annual meeting		3,088.64
Bureau of Public Education:		
Director's salary	$ 3,500.00	
Director's expense	288.51	
Committee's expense	1,974.64	
Operating expense	1,433.90	
		7,197.05
Postgraduate lectures		2,576.65
American Medical Assn. delegates		302.88
Postage, telephone and telegraph		1,966.94
Rent		2,040.00
Stenographers' salaries		2,640.00
Stationery, printing, and supplies		826.08
Unemployment insurance		619.67
Miscellaneous committee expense		499.08
Auditing		100.00
Dues and subscriptions		59.80
Employees' bonds		30.00
Liability insurance		40.00
Industrial insurance		16.64
Certificate of deposit purchased		10,000.00
Miscellaneous expense		56.87
Total disbursements		$ 60,428.44
Cash on deposits and bonds on hand at Dec. 31, 1940		73,199.08
Total accounted for		$133,627.52

EXHIBIT B—Statement of Cash and Bond Reconciliation at December 31, 1940

The Huntington National Bank	
Balance as shown by bank certicate at December 31, 1940	$ 4,160.34
Less checks outstanding	961.26
Balance of cash as shown by books at December 31, 1940	$ 3,199.08
United States Treasury Bonds	70,000.00
Total balance as shown by books at December 31, 1940	$ 73,199.08

THE JOURNAL

The financial condition of The Ohio State Medical Journal at December 31, 1940 (shown in detail in Exhibit A), was as follows:

Current assets	$ 2,751.37
Less current liabilities	56.05
Net current assets	$ 2,695.32
Property assets	2,502.57
Total net assets	$ 5,197.89
The above is represented by:	
Surplus	$ 5,197.89

EXHIBIT A—Balance Sheet at December 31, 1940

Current Assets		
Cash—The Ohio National Bank		$ 2,099.84
Cash—petty		10.00
Total cash		$ 2,109.84
Accounts receivable		641.53
Total current assets		$ 2,751.37
Property Assets—Furniture and fixtures (depreciated value)		$ 2,502.57
Total Assets		$ 5,253.94
LIABILITIES AND SURPLUS		
Current Liabilities		
Account payable		$ 1.90
Subscriptions prepaid		54.15
Total current liabilities		$ 56.05
Surplus		
Surplus at January 1, 1940	$ 5,317.99	
Less—net loss for the year ended December 31, 1940	120.10	
Surplus at December 31, 1940		5,197.89
Total Liabilities and Surplus		$ 5,253.94

EXHIBIT B—Statement of Profit and Loss for the year ended December 31, 1940

Revenue		
Advertising		$ 13,054.40
Less:		
Commissions on advertising	$ 812.84	
Cash discounts	431.83	
Total deductions		1,244.67
Advertising revenue net		$ 11,809.73
Circulation		10,189.32
Total revenue		$ 21,999.05
Expenses		
Journal printing	$14,846.90	
Office salaries	5,440.00	
Journal postage	773.70	
Illustrations and engraving	201.69	
Journal envelopes	256.36	
Depreciation	273.17	
Clipping service	78.00	
Dues and subscriptions	41.10	
Office supplies and expense	204.23	
Bad debts	4.00	
Total expense		22,119.15
Net Loss transferred to surplus		$ 120.10

EXHIBIT C—Statement of Cash Reconciliation at December 31, 1940

The Ohio National Bank	
Balance as shown by bank certificate at December 31, 1940	$ 2,554.84
Less checks outstanding	455.00
Balance as shown by books at December 31, 1940	$ 2,099 84
Petty Cash	10.00
Total Cash at December 31, 1940	$ 2,109.84

Report of the President of the Woman's Auxiliary

THE first year of the Woman's Auxiliary to the Ohio State Medical Association has been devoted mainly to the organization of auxiliaries to county medical societies. Before the formation of the state auxiliary at Cincinnati last May, there were two local auxiliaries in Ohio: that in Stark County, which will have been in existence 13 years in June, and the Richland County auxiliary which has functioned for over two years. The first new auxiliary in the state was formed last September, and since then others have been established, until now there are 23 local organizations with a paid membership of 1,413. Each one of the 11 districts is represented by one or more auxiliaries.

Following is a list of the districts, counties in which auxiliaries have been organized, names of the district directors and the presidents and secretaries of the auxiliaries:

First District—Mrs. Henry B. Freiberg, Cincinnati, director. **Hamilton**—Mrs. William L. Freyhoff, pres.; Mrs. W. B. Carmon, secy., Cincinnati. **Highland**—Mrs. W. M. Hoyt, pres.; Mrs. W. B. Roads, secy., Hillsboro.

Second District—Mrs. W. W. Trostel, Piqua, director. **Miami**—Mrs. Charles Baker, West Milton, pres.; Mrs. E. R. Torrence, Troy, secy.

Third District—Mrs. H. C. Weisenbarger, Lima, director. **Allen**—Mrs. Walter A. Noble, pres.; Mrs. Roger L. Tecklenberg, secy., Lima. **Crawford**—Mrs. John M. Kidd, pres.; Mrs. M. L. Helfrich, secy., Galion. **Seneca**—Mrs. Wade K. Chamberlin, Tiffin, pres.; Mrs. H. E. Hengen, New Riegel, secy. **Van Wert**—Mrs. James R. Jarvis, pres.; Mrs. F. A. McCammon, secy., Van Wert.

Fourth District—Mrs. A. A. Brindley, Toledo, director. **Lucas**—Mrs. Ralph P. Daniells, pres.; Mrs. Glenn H. Reams, secy., Toledo.

Fifth District—Mrs. Clyde L. Cummer, Cleveland Heights, director. **Cuyahoga**—Mrs. Fred C. Oldenburg, pres.; Mrs. Charles G. LaRocco, secy., Cleveland.

Sixth District—Mrs. R. B. Poling, Youngstown, director. **Mahoning**—Mrs. R. M. Morrison, pres.; Mrs. John Noll, secy., Youngstown. **Stark**—Mrs. W. R. Portz, Hartville, pres.; Mrs. J. F. Toot, secy., Canton. **Trumbull**—Mrs. W. G. Drown, pres.; Mrs. Charles A. Bogue, secy., Warren.

Seventh District—Mrs. C. W. Kirkland, Bellaire, director. **Belmont**—Mrs. R. H. Wilson, Martins Ferry, pres.; Mrs. W. A. Knapp, Barnesville, secy. **Tuscarawas**—Mrs. H. A. Coleman, New Philadelphia, pres.; Mrs. G. W. Stelzner, Newcomerstown, secy.

Eighth District—Mrs. D. R. Sperry, Newark, director. **Washington**—Mrs. R. M. Meredith, pres.; Mrs. Richard H. Sloan, secy., Marietta.

Ninth District—Mrs. O. R. Micklethwait, Portsmouth, director. **Scioto**—Mrs. S. L. Meltzer, pres.; Mrs. F. C. Beeks, secy., Portsmouth.

Tenth District—Mrs. H. M. Clodfelter, Columbus, director. **Franklin**—Mrs. Ralph W. Hoffman, Columbus, pres.; Mrs. O. W. Jepsen, Canal Winchester, secy. **Knox**—Mrs. Julius Shamansky, pres.; Mrs. John R. Claypool, secy., Mt. Vernon.

Eleventh District—Mrs. Lincoln Fisher, Mansfield, director. **Ashland**—Mrs. L. G. Sheets, pres.; Mrs. R. P. Bogniard, secy., Ashland. **Huron**—Mrs. J. D. Bradish, pres.; Mrs. T. H. Smith, secy., New London. **Medina**—Mrs. H. T. Pease, Wadsworth, pres.; Mrs. R. F. Fasoli, Brunswick, secy. **Richland**—Mrs. J. L. Stevens, pres.; Mrs. R. C. Rehder, secy., Mansfield. **Lorain**—Mrs. S. J. Birbeck, Elyria, pres.; Mrs. C. H. Frederick, Lorain, secy.

This is the last call for reservations for the Nineteenth Annual Convention of the Woman's Auxiliary to the American Medical Association, which will be held at Hotel Carter, Cleveland, June 2-6. All Cleveland extends a hearty welcome to Auxiliary members.

Any county which is organized, but has not paid dues to the State and National Auxiliaries, cannot be recognized as an auxiliary, nor can it send delegates to the state meeting in June. May we again urge that any such groups pay its dues immediately and become one of the charter members of the Ohio Auxiliary.

HAVE RECEIVED COOPERATION

The officers of the State Auxiliary wish to thank the Ohio State Medical Association and its office staff for their cooperation and help in this our first year's work. The same fine spirit of cooperation has been shown us throughout the state by the county medical societies, and this has helped us greatly in our organization work. We wish to thank them also.

We hope that the Woman's Auxiliary to the Ohio State Medical Association may grow in numbers and usefulness, standing ready at all times to meet local and state needs, as well as any national emergency that may come.

All physicians' wives in Ohio, whether members of an auxiliary or not, are cordially invited to attend our Ohio meeting and luncheon, Monday, June 2, at the Carter Hotel, Cleveland. This is our first state meeting as a fully organized auxiliary. We hope to have a large attendance. Don't forget the date—Monday, June 2, at 9 A.M.

MRS. J. EDWIN PURDY, Canton,
President.

Enactment of House Bill 51, the Enabling Act for Medical Service Plans, Assured; En Route to Governor Bricker for Signature; Passes House, 110-8, Senate, 32-2

ENACTMENT of House Bill No. 51, the enabling act legalizing the formation of medical service plans for those of low income, which was actively backed in the present General Assembly by the Ohio State Medical Association, is assured.

As this issue of *The Journal* went to press, the bill was in transit to Governor Bricker for his signature. This is assured as the Governor has repeatedly expressed himself as being in sympathy with the purposes of the proposal.

House Bill 51 cleared its last big hurdle on April 24 when it was passed by the State Senate by a vote of 32 to 2. It had been passed by the House of Representatives on April 2 by a vote of 110 to 8.

The overwhelming vote which the bill received in both houses of the General Assembly does not by any means indicate that the proposal had easy sailing. As a matter of fact, the bill had a real battle every step of the way. It passed largely because of the efficient work which was done in most of the counties by the legislative committeemen, officers and volunteer workers of the county medical societies.

BATTLE OF AMENDMENTS

The major conflicts which were weathered by House Bill 51 were those involving efforts made by representatives of the Farm Bureau and the C.I.O. to have amendments written into the measure. These amendments would have eliminated provisions for reasonable supervision of medical service plans by the medical profession and made such plans virtually consumers' cooperatives. The amendments were proposed by those groups when the bill was before committees for hearings, on the floor of the House and on the floor of the Senate but were defeated in all instances. A series of constructive amendments were inserted in the bill by the House Insurance Committee, with the full approval of the sponsors of the proposal, and they have improved the measure considerably.

House Bill 51 as it passed the General Assembly is identical to the form it was in when reported out and recommended for passage by the House Insurance Committee (See page 361, April issue, *The Journal*), with the exception of one very minor amendment adopted by the House to the effect that the contracts to subscribers must be "specific as to benefits".

Many of the 142 members of the General Assembly who supported the bill with a "yes" vote also took an active personal part in the hard fight which resulted in the passage of House Bill 51. They are too numerous to name but their work will not go unrecognized by the medical profession as it is deeply appreciated.

CO-AUTHORS DID REAL JOB

Special recognition and appreciation must be given to Miss Margaret Mahoney, Cleveland, member of the House of Representatives, and Senator Lawrence A. Kane, Cincinnati, co-authors of the bill.

Miss Mahoney, a Democrat, introduced the bill in the House and led the fight for the bill through the House Insurance Committee and on the floor of the House.

As soon as House Bill 51 reached the Senate, Senator Kane, a Republican, took over the managership of the measure and steered it successfully through the Senate.

Had the bill not been in such capable and experienced hands and had Miss Mahoney and Senator Kane not put up the vigorous battle which they did on behalf of the measure, the outcome probably would still be in doubt.

STATEMENT BY DR. SKIPP

In a statement issued to the press on the day the bill passed the Senate, Dr. William M. Skipp, Youngstown, president of the State Association, expressed to the Legislature the appreciation of the medical profession of Ohio for having assisted the profession in its efforts to meet a real health problem among a large group of Ohio citizens.

Also, Dr. Skipp stated that he would recommend to the House of Delegates of the State Association at its meeting in Cleveland the first week in June, that it authorize the appointment of a coordinating committee to assist various local medical societies in drafting and initiating medical service plans under the provisions of House Bill 51. He expressed himself as believing that plans must be as uniform as possible and that they should be prepared carefully and in strict compliance with the enabling act.

THOSE WHO VOTED "YES"

Those who voted "yes" on House Bill 51 and who should be thanked for their support of the measure, were: Representatives Acton (Preble), Addison (Franklin), Anderson (Pike), Asmann (Hamilton), Babka (Cuyahoga), Ballard (Jackson), Barrick (Coshocton), Best (Franklin), Betts (Hancock), Bixler (Summit), Brehm (Hocking), Burgett (Ashtabula), Cantwell (Mahoning), Carney (Cuyahoga), Caryl (Union), Catlett (Richland), Chapman (Geauga), Cipra (Cuyahoga), Clayman (Trumbull), Cramer (Lucas), Crunelle (Belmont).

Davenport (Ross), Day (Cuyahoga), Deddens (Hamilton), DeRighter (Cuyahoga), Dilley (Muskingum), Driscoll (Clark), Dworkin (Cuyahoga), Easton (Lake), Ellison (Adams), Essex (Paulding), Evans (Portage), Fair (Holmes), Ford (Fulton), Forsythe (Guernsey), French (Delaware), Gardner (Butler), Giffin (Morrow), Grad (Hamilton), Graves (Scioto), Green (Licking), Guess (Carroll).

Hannah (Brown), Hanratty (Cuyahoga), Harmony (Shelby), Hawley (Darke), Hayden (Clermont), Hess (Stark), Hildebrant (Clinton), Hoffman (Hamilton), Houston (Champaign), Hunter (Ashland), Johnston (Defiance), Kasch (Summit), Keplinger (Stark), Kerr (Columbiana), Kilpatrick (Trumbull), King (Clark), Kirkpatrick (Knox), Knepper (Williams), Kowalk (Sandusky), Krueger (Erie).

Laderman (Lucas), LeFever (Athens), Lehman (Wayne), Longenecker (Wood), Mahoney (Cuyahoga), Marshall (Franklin), Martz (Warren), McChesney (Greene), McCormick (Logan), McElhaney (Scioto), McKelvey (Monroe), Mees (Meigs), Metcalf (Franklin), Michener (Morgan), Miller (Montgomery), Milligan (Highland), Moulton (Crawford), Myers (Allen), Nailor (Franklin), Nixon (Jefferson), O'Brien (Cuyahoga), O'Neill (Washington).

Paskell (Perry), Pokorny (Cuyahoga), Radcliff (Pickaway), Reed (Vinton), Renner (Hamilton), Sawicki (Cuyahoga), Seymour (Lucas), Shaw (Madison), Shilling (Stark), Siferd (Auglaize), Simpson (Hardin), Sims (Fairfield), Slagle (Gallia), Stephenson (Columbiana), Stewart (Lawrence), Sulzman (Cuyahoga), Sweeney (Cuyahoga).

Tarr (Hamilton), Thomas (Marion), Thompson (Noble), Turpeau (Hamilton), Wilkinson (Van Wert), Williams (Fayette), Williams (Harrison), Yoder (Medina), Zona (Cuyahoga).

Senators Adams (Wood), Baertschi (Lucas), Barrett (Montgomery), Bartunek (Cuyahoga), Connolly (Lucas), Daniels (Highland), Glass (Mahoning), Gray (Miami), Hays (Belmont), Hoffman (Franklin), Hughes (Butler), Hunter (Lawrence), Jameson (Lorain), Jones (Meigs), Kane (Hamilton), Keifer (Clark), Kilbane (Cuyahoga), Lipscher (Mahoning), McKie (Hamilton).

Metzenbaum (Cuyahoga), Nickels (Tuscarawas), Phillips (Athens), Reiners (Hamilton), Seibert (Auglaize), Vanik (Cuyahoga), Ward (Franklin), Whitacre (Stark), Whitney (Delaware), Whittemore (Summit), Witter (Stark), Young (Cuyahoga), Zoul (Cuyahoga).

Jury's Verdict in A.M.A. Trial Has Even the Attorneys Stumped

The jury in the case in the U. S. District Court, Washington, D. C., in which the United States Government brought suit on criminal charges in a conspiracy against the American Medical Association, three other medical societies and 21 individual physicians, brought in its verdict on April 4. The final verdict of the jury was that the American Medical Association and the District of Columbia Medical Society are guilty and all of the individual defendants not guilty. When presentation of evidence had been completed by the prosecution, Justice Proctor directed the jury to acquit the Harris County Medical Society, the Washington Academy of Surgery and two of the individual defendants. One of the individual defendants, Dr. Groover, died before the case came to trial.

The Journal of the American Medical Association had the following to say about the verdict:

"Newspapers, radio commentators and many others expressed confusion in endeavoring to understand this verdict This confusion arose because five members of the staff of the American Medical Association, including the Secretary, the only ones connected by the prosecution with this case, were declared by the jury to be innocent of the charges, yet the organization itself was found guilty. Likewise the verdict found the defendant officials and members of the various committees of the District of Columbia Medical Society to be innocent, and yet the organization itself to be guilty. The attorneys for the American Medical Association and the District of Columbia Medical Society are undertaking at once legal procedure toward setting aside this verdict and toward making a suitable motion to appeal."

Cleveland—Dr. E. E. Ecker, associate professor of immunology of the Western Reserve University School of Medicine, with his associate, Dr. Louis Pillemer, discussed recent work in immunochemistry before the New York Academy of Sciences, meeting at the Museum of Natural History, New York City.

Cincinnati—Dr. Carl A. Wilzbach, Cincinnati health commissioner, spoke on "Cancer Control", at a meeting of the Wilmington Business and Professional Women's Club.

Deferment of Medical Students Becomes Vital Problem; Final Decision Rests with Local Draft Boards; Many More Ohio Physicians Called to Active Service During April

ONE of the important problems of the National Defense Program which has been receiving the serious consideration of national officials, as well as official representatives of the medical profession, is that involving deferment of medical students under the Selective Service Law.

The Selective Service Act does not permit deferment of students beyond July 1, 1941. Students now enrolled in universities who have been deferred from active service are being re-classified. Selective Service officials have frowned on blanket deferment for groups, stating that the decision rests with local draft boards under the "necessary man" provision of the act and regulations. So far, efforts to amend the Selective Service Act granting blanket deferment to students and other groups have been unsuccessful.

The following bulletin issued recently to State Selective Service districts by the National Headquarters, Selective Service System, sets forth the official attitude on this question:

OFFICIAL BULLETIN ISSUED

"The proper classification of students and other registrants **in training or preparation** constitutes one of the major problems of the Selective Service System. Marked concern has been manifested by educators and other interested persons with respect to the status of students after July 1, 1941, particularly those students enrolled in professional, scientific, technical, or highly specialized fields of endeavor.

"The group deferment of students provided by the Act expires July 1, 1941, and it will, therefore, be necessary for local boards to reclassify all students now in Class 1-D or 1-E prior to July 1, 1941. In reclassifying students, all facts in the possession of the local board at the time of the student's classification in 1-D or 1-E should again be given full consideration, together with any evidence of changed status which may have occurred since classification.

"It is clearly the duty and responsibility of the local board to determine the classification of each registrant. The intelligent selection or deferment of registrants, as the national interest may require, is the fundamental purpose of the Selective Training and Service Act of 1940 and the Regulations prescribed thereunder.

"In Paragraph 352 of the Regulations, it is provided that a registrant shall be placed in Class II-A if the registrant is found by the local board to be a **necessary man** in any industry, business employment, agricultural pursuit, governmental service, or any other service or endeavor or **in training or preparation therefor**, the maintenance of which is necessary to the national health, safety, or interest. Local boards shall give proper weight to this provision in dealing with the claims for occupational deferment of **necessary men** engaged **in training or preparation** for activities necessary to the national health, safety, or interest.

"Students or other registrants undergoing instruction may be deferred in Class II-A by the local board where the activity for which the registrant is **in training or preparation** is one essential to the national health, safety, or interest, and the registrant is found to be a **necessary man**. The necessity of providing the required replacements for and additions to those men deemed by local boards as being engaged in essential activities should be considered by local boards in making their determination in individual cases. In determining whether or not a student is a **necessary man** within the provisions of Paragraph 351, the local board should give due consideration to such factors as the length of time which the student has been pursuing the course in question, his relative progress and standing in such course, and his relative chances for employment or placement in the activity for which he is preparing. This latter factor may be evidenced by contracts of employment or other reasonable assurance that the registrant will engage in an essential activity.

"The period of deferment in Class II-A may not exceed six months but such deferment may be renewed from time to time if the local board finds that such continuance is justified under the Regulations.

"In applying these broad provisions there must be no deviation from the clear statutory prohibition against group deferments. The local board has full authority and responsibility for deciding whether or not a registrant is a **necessary man** and whether he should be selected or deferred. It must consider all of the evidence submitted in connection with each individual case and must decide each case on its particular facts."

REASONS FOR DEFERMENT

This question has been given study by the Committee on Medical Preparedness of the Ohio State Medical Association and a communication on the matter will be sent in the near future to the preparedness committee of the county medical societies. It is the feeling of the committee that local draft boards should consider this a vital question and should grant deferment to medical students for the following reasons: (1) There must be continuity in medical education in order to maintain an adequate supply of physicians for the armed forces and civilian population; (2) if the supply of physicians diminishes, the health of the civilian population will be materially damaged; (3) the armed forces are badly in need of medical personnel which cannot be furnished if there is a substantial decrease in medical graduates; (4) medical students will be more valuable to the national defense if permitted to complete their medical education as they can then be enrolled with the armed forces as medical reserve officers.

OPENINGS IN RESERVE CORPS

The War Department has announced that there are several thousand vacancies in the Medical Reserve Corps and that qualified doctors of medicine of draft age are encouraged to apply for commissions in the Medical Reserve Corps regardless of whether or not they have been inducted or are awaiting induction. Successful applicants will be commissioned as first lieutenants, even though it is not practicable to order them to extended active duty at once.

The National Headquarters of the Selective Service System have asked state directors to request local boards to get in touch with all qualified and licensed physicians who have registered under the draft law and encourage them to seek admission to the Reserve Corps instead of inducting them as selectees for military training.

During the past month, Governor Bricker appointed Lt. Col. C. W. Goble as State Director of Selective Service, succeeding the late General Gilson D. Light. Colonel Goble has been a member of the administrative staff of State Selective Service Headquarters since the creation of the headquarters.

OHIO PHYSICIANS CALLED

During the past month the following Ohio physicians have been called to active service or have had their orders revoked:

Camp Grant, Illinois: 1st Lt. William Ridley Sparling, London.

Ft. Knox, Kentucky: Capt. Joseph Rudolph Kriz, Toledo; 1st Lt. Roland Edward Nieman, Cincinnati; 1st Lt. John James O'Bell, Kingsville; 1st Lt. Edward Francis Ockuly, Toledo; 1st Lt. John Lloyd Maple, Louisville; Capt. Walter Houser Matuska, Ottawa; 1st Lt. Regis Francis Golubski, Cleveland; 1st Lt. Albert Louis Berndt, Portsmouth; 1st Lt. Isadore Irving Binzer, Toledo; 1st Lt. Ralph Burbank Cunningham, Cincinnati; 1st Lt. James John Del Vecchio, Rayland; 1st Lt. Adrian Joseph Hartzler, Wooster; 1st Lt. Joseph Meyer Kaplan, Cleveland; 1st Lt. Cornelius Lynch, Jr., Toledo; 1st Lt. Morris Stanford Osherwitz, Cincinnati; 1st Lt. John Dexter Osmond, Jr., Cleveland Heights; 1st Lt. Albert Irving Reaven, Akron; 1st Lt. Albert Selfman, Mansfield; 1st Lt. Harry Edmund Shilling, Troy; 1st Lt. Earl Cornelius Van Horn, Springfield; 1st Lt. Joseph Daniel Vande Velde, Cleveland; 1st Lt. Joseph John Wasilko, Youngstown; 1st Lt. Harold Frederick Wherley, Coshocton; 1st Lt. Robert Edward Williams, Barberton; 1st Lt. Wilbur Eilers McKee, Bryan; 1st Lt. Lewis Oliver Frederick, Jr., Osborne; 1st Lt. Robert Joseph Earl Semons, Carey; 1st Lt. Leo Diamond, Cincinnati; 1st Lt. Arnold Arthur Schillinger, Chillicothe; 1st Lt. Geo. Edgar Henderson, New Athens.

Camp Forrest, Tenn.: 1st Lt. Stanley Edward Turel, Cleveland; 1st Lt. Charles Emmett Richards, Jr., Cleveland Heights.

Ft. Benning, Ga.: 1st Lt. Henry Ranney Large, Cleveland; 1st Lt. Kenneth Campbell Sharretts, Cincinnati.

Camp Shelby, Miss.: Capt. Carl Schulze Junkerman, Columbus; 1st Lt. Peter Rowe, Cleveland; 1st Lt. Isadore Charles Sharon, Cincinnati; 1st Lt. Herbert Perry Ramsayer, Canton.

Ft. Benjamin Harrison, Ind.: 1st Lt. Alton Wilson Behm, Chardon; 1st Lt. John Stephen Goldcamp, Youngstown; 1st Lt. Wm. Arthur Moore, Cincinnati; 1st Lt. James Henderson Park, Ashtabula; 1st Lt. William Leo Regan, Wilmington; 1st Lt. David Brown, Columbus; 1st Lt. Bert Seligman, Toledo.

Randolph Field, Texas: 1st Lt. John Edwin Dougherty, Canton.

Ft. Jackson, S. C.: Capt. Herman Edwin Wilkinson, Van Wert; 1st Lt. John Mark Moore, Piney Fork; 1st Lt. Gerald Newton Wilson, Columbus.

Ft. Hayes, Ohio: Capt. Adelbert J. G. Kuehn, Toledo; 1st Lt. Jack Srulowitz, Belpre; Capt. Beecher Love Smith, Columbus; 1st Lt. Robert Francis Donley, Columbus; 1st Lt. Paul Dewey Grove, Cincinnati; 1st Lt. Dillard Bennet York, Jr., Columbus; 1st Lt. John Edwin Brown, Jr., Columbus; 1st Lt. Arch Dunham Harvey, Lebanon; 1st Lt. William Lewis Wead, Sabina; 1st Lt. Karl H. Feistkorn, Marion.

Camp Davis, N. C.: 1st Lt. George Warren Campbell, Columbus.

Ft. Thomas, Ky.: 1st Lt. Paul Chrenka, Cleveland; 1st Lt. Geo. Haskel Curtis, Cleveland; 1st Lt. Chas. Alfred Hulse, Cleveland; 1st Lt. Randolph Patton Moore, Cleveland; 1st Lt. Milton Ross Ort, Columbus; 1st Lt. Marvin Franklin Steves, Cincinnati; 1st Lt. Herbert Joseph Brinker, Cincinnati.

Camp Blanding, Fla.: Capt. Robert Roland Boice, Pomeroy; 1st Lt. Walter Frederick Bartz, Youngstown; 1st Lt. Wilbur Max Brown, Mansfield; 1st Lt. Secondo Raymond Cafaro, Youngstown; 1st Lt. James Edward Ryan, Kelleys Island; 1st Lt. Francis Friedman Silver, Akron; 1st Lt. Walter Joseph Urbanski, Cleveland.

Ft. Bragg, N. C.: 1st Lt. Harold Norbert Cavanaugh, Reading; 1st Lt. Chas. Foster Egolf, Cincinnati; 1st Lt. Louis John Finkelmeier, Cincinnati; 1st Lt. Mortimer Herzberg, Jr., Cincinnati; 1st Lt. Nathan Donald Belinky, Youngstown; 1st Lt. Eugene Rudolph Benedetto, Alliance; 1st Lt. James Robert Collins, Cleveland; 1st Lt. Joseph Kannaly Doran, Cleveland; 1st Lt. John Spencer Fish, Cleveland Heights; 1st Lt. Francis Regis Harrison, East Liverpool; 1st Lt. Edward Franz Hellwig, Cleveland; 1st Lt. Geo. Forster Hilles, Cleveland; 1st Lt. Wm. McConkey Keller, Lodi; 1st Lt. Rudolph Alvin Light, Cleveland; 1st Lt. Thurman Francis McAllister, Coshocton; 1st Lt. Ben Vernon Myers, Elyria; 1st Lt. Wm. Michael Novince, Cleveland; 1st Lt. Robert Joseph Weinrich, Massillon.

Orders Revoked: 1st Lt. Richard Adolphus Lucas, Columbus, previously ordered to Camp Forrest, Tenn.; 1st Lt. Samuel Joseph Restifo, Cleveland, previously ordered to Camp Shelby, Miss.; 1st Lt. Louis Lytton, Cleveland Heights, previously ordered to Randolph Field, Texas; 1st Lt. Chas. Elmer Dillard, Cincinnati, previously ordered to Camp Livingston, La.; Major

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Wm. Byrne Morrison, Columbus, previously ordered to Ft. Jackson, S. C.; Capt. Harold Coy Schmuck, East Canton, previously ordered to Camp Forrest, Tenn.; 1st Lt. Roland Aaron Reich, Centerville, previously ordered to Camp Shelby, Miss.; 1st Lt. Robert Francis Koors, Dayton, previously ordered to Ft. Jackson, S. C.; 1st Lt. David Taylor, Yellow Springs, previously ordered to Ft. Jackson, S. C.; 1st Lt. Wilbur Graham Fisher, Columbus, previously ordered to Ft. Jackson, S. C.; Capt. Albert Ralph Miller, Cleveland Heights, previously ordered to Camp Shelby, Miss.; Capt. Louis Jay Goldblatt, Youngstown, previously ordered to Camp Davis, N. C.; 1st Lt. Isadore Meschan, Cleveland, previously ordered to Camp Shelby, Miss.; 1st Lt. Orris Williard Hoffman, Franklin, previously ordered to Camp Forrest, Tenn.; 1st Lt. Harold Wm. Law, Warren, previously ordered to Camp Forrest, Tenn.; 1st Lt. Sidney Elmer Wolpaw, Cleveland Heights, previously ordered to Ft. Hayes, Ohio; Lt. Col. Adam Benjamin Denison, Shaker Heights, previously ordered to Ft. McClellan, Ala.

New Tri-State Officers

Approximately 200 physicians attended the 69th Annual Meeting of the Northern Tri-State Medical Association held at Tiffin, April 9. Dr. Lyman R. Rawles, Ft. Wayne, Indiana, was named president succeeding Dr. Burt Hibbard, Lima. Other officers chosen were: Dr. E. Benjamin Gillette, Toledo, vice-president; Dr. F. R. N. Carter, South Bend, Indiana, secretary; Dr. Douglas Donald, Detroit, treasurer, and the following counsellors: Dr. G. O. Larson, LaPorte, Ind.; Dr. H. E. Randall, Flint, Mich.; Dr. O. P. Klotz, Findlay; Dr. Howard Cummings, Ann Arbor, Mich., and Dr. Donald Cameron, Fort Wayne, Ind.

Dr. Upham Reappointed to State Medical Board

Dr. J. H. J. Upham, Columbus, Dean of the Ohio State University College of Medicine, has been reappointed by Governor Bricker as a member of the State Medical Board to serve until March 18, 1948. His appointment was confirmed by the State Senate on March 25. This is Dr. Upham's fifth consecutive appointment to the Board. He was first appointed 28 years ago, and has served several times as President of the Board.

Cleveland—Dr. Clarence D. Selby, medical director of the General Motors Corporation, Detroit, and former president of the Ohio State Medical Association, spoke on "The Worker in Wartime", in one of a series of free public health lectures sponsored by the Cleveland Academy of Medicine and the Cleveland Medical Library Association.

Dr. McCurdy Resigns as Medical Chief at Industrial Commission

On March 31 Dr. Sidney McCurdy resigned as supervisor of the Medical Section of the State Industrial Commission. In announcing his resignation, Dr. McCurdy stated that he was in disagreement with the Commission on certain matters of policy involving the Medical Section. Expressing his regret at Dr. McCurdy's leaving, Will T. Blake, chairman of the Commission, was quoted in the press as saying, "We thought him a very good man and feel that he did a good job here".

Dr. McCurdy had been in charge of the Medical Section of the State Industrial Commission since March 1, 1936. Thoroughly trained in industrial medicine, he was for 18 years chief surgeon for the Youngstown Sheet and Tube Company and was later engaged in private practice in Youngstown, specializing in traumatic surgery. Dr. McCurdy is a past president and former secretary of the Mahoning County Medical Society. He is now residing at East St. Johnsbury, Vermont.

Pending appointment of Dr. McCurdy's successor, Dr. Henry P. Worstell, assistant supervisor of the Medical Section since October, 1938, has been appointed acting supervisor. Dr. Worstell was formerly orthopedic consultant in the department. He holds a certificate from the American Board of Orthopaedic Surgery, Inc., and is a member of the Ohio State Medical Association and Fellow of the American Medical Association.

Civil Service Exams for Physicians

The United States Civil Service Commission announces examinations for physicians in government service. The positions are: senior medical officer, $4600 per year; medical officer, $3800 per year, and associate medical officer, $3200 per year. Examination will be for positions in the Public Health Service, Food and Drug Administration, Veterans' Administration, Civil Aeronautics Administration and the Indian Service. Applications must be filed with the U.S. Civil Service Commission, Washington, D.C.

Women Doctors Urged to Register

Dr. Clara Raven, Youngstown, chairman of the Medical Service Committee of the American Medical Women's Association, Northern Ohio District, has been notified that the roster registering medical women in that district is far from complete, and earnestly urges that great effort be made to complete registration before the annual meeting in June. The registrations have already been of use in securing leaders for lay groups in first aid and in cooperating with other preparedness organizations.

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Industrial Commission Decides To Make Reasonable Supply of C-3 Blanks Available to Physicians on Request

OHIO physicians may now obtain a limited supply of C-3 (medical only) blanks from the State Industrial Commission, or its branch offices, in accordance with a resolution adopted by the Commission on April 4. This action was taken following a request from the Sub-Committee on Workmen's Compensation of the Ohio State Medical Association that such forms be made available to physicians.

In making the request, the Committee pointed out that the former regulation restricting the distribution of forms to employers only, frequently worked a hardship on physicians. It was stated that many times injured workmen appear for treatment without a C-3 form, and never do obtain the blank for the physician's signature. By having a supply of these blanks on hand, the physician will not be penalized in those cases involving non-cooperative employers or employees.

NO CHANGE IN PROCEDURE

There is no change in the administrative procedure governing the filing of C-3 blanks. They must be signed by the attending physician, the employee and the employer, the latter being charged with the responsibility of forwarding the blanks to the State Industrial Commission. Also, it should be noted that blanks should not be requested by physicians unless they cannot be obtained from employers.

The resolution which was offered by Will T. Blake, chairman of the Commission, and concurred in by the other two members, James A. White and Clarence H. Knisley, read as follows:

"WHEREAS, Section 1465-52 of the General Code of Ohio provides that the Industrial Commission shall prepare and furnish blank forms for applications for benefits or compensation from the State Insurance Fund and provide in its rules for their distribution, and that it shall be the duty of the insured employers to constantly keep on hand a sufficient supply of such blanks, and

"WHEREAS, the Commission has provided in its rules that printed forms of all notices, applications, etc., necessary for perfecting any claim before the Commission will be furnished free of charge by the Commission, and that such forms shall be used in all cases, and that employers shall keep on hand a supply of application blanks and shall furnish a copy of the proper blank to each employee sustaining an injury or claiming to be affected by an occupational disease, and that employers should cooperate with and assist injured employees in completing their applications,

"BE IT THEREFORE RESOLVED, that printed forms for use in filing applications for benefits or compensation, or for submitting other necessary proof in perfecting any claim before the Commission, shall be furnished only to claimants or employers, except that a limited number of applications for payment of benefits or compensation may be furnished to doctors and hospitals to be used only in cases where, after reasonable effort, such applications cannot be secured from employers, and that a limited supply of blank forms necessary for completing claims may be furnished to attorneys or representatives of claimants or employers. Any previous resolutions or orders in conflict herewith are hereby revoked."

EXPLANATORY MEMORANDUM

The practical effect of the resolution is clearly explained in a memorandum addressed to members of the District Boards of Claims, Branch Offices and department heads by D. W. Wiper, secretary of the Commission, reading in part as follows:

"On April 4, 1941, the Industrial Commission of Ohio adopted the attached resolution relative to the supplying of forms for use in filing applications for benefits or compensation from the Workmen's Compensation Fund.

"With reference to doctors and hospitals, you will note the following language in the resolution, to-wit:

"'* * * except that a limited number of applications for payment of benefits or compensation may be furnished to doctors and hospitals to be used only in cases where, after reasonable effort, such applications cannot be secured from employers, * * *.'

"Doctors and hospitals are primarily interested in the C-3 form. A supply of from six to ten of said forms may be furnished to doctors and hospitals from time to time; such supply to be used by the doctor or hospital only when they are unable to secure C-3 form from the injured employee or his employer. There may be exceptional cases wherein a doctor or hospital may require other original applications than a form C-3, by reason of the employer's removal from the locality or retirement from business, and in such exceptional cases other original applications may be given to such doctor or hospital to be used in that certain claim only. A supply of such other original applications is not to be furnished. It should be kept in mind that the statute requires employers to constantly keep on hand a sufficient supply of application blanks. Further, Rule V of the Rules Governing Procedure of the Industrial Commission provides, in part, that the employer shall furnish a copy of the proper application blank to every employee sustaining an injury or claiming to be affected by an occupational disease.

"When issuing said form C-3 attention should be called to the fact that Parts I and III are to be executed by the employer and the physician respectively, while Part II is to be completed by the employee.

"Attorneys and representatives of claimants or employers may be furnished a limited supply of certain forms, not exceeding six to ten in number at reasonable intervals of time.

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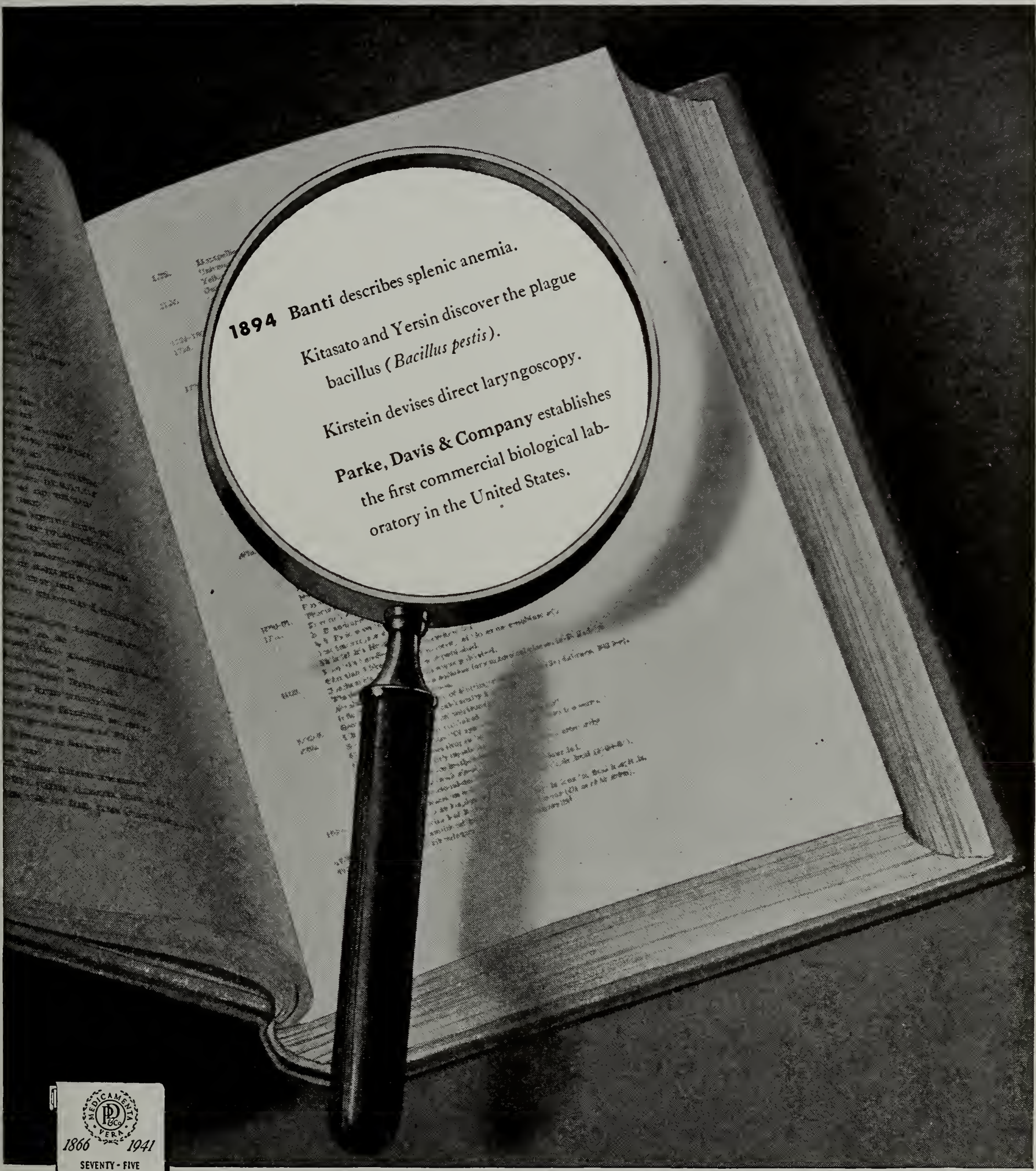

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News Notes

Akron—Dr. L. A. Witzeman has been named chief-elect of the staff of People's Hospital. Dr. A. S. McCormick was re-elected secretary, and Dr. J. G. Blower became chief-of-staff, succeeding Dr. W. E. McCorkle.

Burton—"Minister in the Sickroom" was the topic discussed by Dr. W. A. Reed at a meeting of the Lake-Geauga Ministerial Association.

Cincinnati—Dr. Charles E. Kiely, President of the Academy of Medicine, was moderator of a forum on "Mental Health in Cincinnati", at a civic luncheon of the Woman's City Club. Speakers included: Dr. Jack Hertzman, Dr. Mabel R. Fernald, Dr. Thomas A. Ratliff and Dr. Phillip E. Piker.

Cincinnati—Directors of the University of Cincinnati have decided to award the M.D. degree to graduates of the College of Medicine at the end of the fourth year, instead of after a fifth year spent in internship.

Columbus—Physician members of the committee in charge of the new local hospital certification service are Dr. Russel G. Means, Dr. H. M. Clodfelter, Dr. E. J. Stedem and Dr. A. J. Enderlin. Mrs. Ralph W. Hoffman, president of the Woman's Auxiliary to the Columbus Academy of Medicine, is chairman of the committee.

Columbus—Dr. J. Fremont Bateman, superintendent of the Columbus State Hospital, spoke on "Idiosyncrasies of So-called Normal Women", at a meeting of the Cambridge branch of the American Association of University Women.

Dayton—Dr, Sherl J. Winter has been named chairman of the health division of the Council of Social Agencies.

Elyria—Dr. J. H. J. Upham, Dean of the Ohio State University College of Medicine, spoke on "Measures for Betterment of Maternal and Child Health", at a meeting of the Lorain County Maternal Health Association.

Gallipolis—Dr. Charles E. Holzer has been named a member of the Board of Trustees of the Ohio Archaeological and Historical Society.

Ironton—Dr. Anne Marting Alstott spoke on "Modern Miracles in Medicine", at a meeting of the Wellston Study Club.

Ironton—Dr. Ralph F. Massie and Dr. O. H. Henninger have been re-elected president and secretary, respectively, of the General Hospital board.

Kent—"X-ray", was the subject discussed by Dr. Bernard H. Nichols at a meeting of the Kiwanis Club.

Lancaster—Plans are being considered for the enlargement of the Lancaster Municipal Hospital.

Massillon—A campaign to raise $150,000 for a 75-bed addition to Massillon City Hospital began May 1.

Middletown—Dr. C. A. Spitler has been appointed city health commissioner, succeeding the late Dr. G. D. Lummis.

Nelsonville—"Cancer and Cancer Control" was the subject of an address made by Dr. J. L. Webb at a meeting of the Marietta Civic Federation of Women's Clubs.

Nelsonville—Dr. Nathan Hill began his 50th year in the practice of medicine in Nelsonville April 2.

New Philadelphia—Dr. C. D. Kurtz recently completed 50 years in the practice of medicine.

New Philadelphia—Dr. Elliott D. Moore has retired after 53 years in the practice of medicine.

Norwalk—Dr. M. L. Battles spoke on "Medical Care in the Army", at a meeting of the Kiwanis Club.

Sidney—Dr. Harry Wain, local health commissioner, spoke on "Public Health", at a meeting of the Junior Girl Reserves.

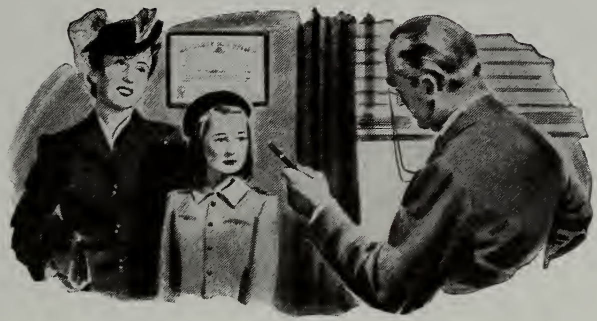
Toledo—The new $450,000 wing to Mercy Hospital was recently dedicated by Bishop Karl J. Alter.

Wakeman—The local American Legion post gave a farewell luncheon for Dr. C. J. Cranston who was assigned to duty with the Medical Corps of the U. S. Army in Hawaii. The post presented Dr. Cranston with a 32nd degree Masonic ring.

Wooster—"Why Worry?", was the subject of an address made by Dr. John J. Sutter, health commissioner of Wayne County, at a meeting of the New London Rotary Club.

Xenia—Dr. Ben R. McClellan has been re-elected dean of the volunteer, medical, surgical and dental consulting staff of the Ohio Soldiers' and Sailors' Orphans' Home. Dr. Harold E. Ray was named secretary.

Youngstown—Dr. Claude B. Norris urged the enactment of House Bill 51 at a recent meeting of the local Business and Professional Women's Club.



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1939. Accepted Foods and Their Nutritional Significance, Council on Foods of the American Medical Association, Chicago.

1939. Food and Life; Yearbook of Agriculture, U. S. Dept. of Agriculture, U. S. Government Printing Office, Washington, D. C.

1939. Canned Food Reference Manual, American Can Company, New York.

1938. Nutrition Abstracts and Reviews 8, 281.

The Seal of Acceptance denotes that the nutritional statements in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

In Memoriam

Lewis C. Bean, M.D., Gallipolis; Starling Medical College, Columbus, 1892; aged 75; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 19. Dr. Bean had practiced in Gallipolis for 49 years. Active in civic affairs, he was president of the City Commission, president of the Ohio Valley Bank and president of the board of trustees of the Presbyterian Church. Surviving are his widow; two sons—Dr. Leo C. Bean, Gallipolis, and Lewis C. Bean, Jr., a premedic student; a daughter and a sister.

Jacob Allen Stout, M.D., Columbus; Starling Medical College, Columbus, 1889; aged 78; member of the Ohio State Medical Association and the American Medical Association; died March 30. Dr. Stout retired from active practice in 1938. He was the first resident physician at St. Francis Hospital, Columbus, in 1890. In 1891 he opened an office for the practice of medicine in Columbus and became demonstrator of anatomy at Starling Medical College, a position he held for 10 years. Dr. Stout was a member of the staff of St. Anthony's Hospital from the time it opened in 1891 until 1939, and from 1932 to 1935 was chief of staff there. He was a charter member of the Bexley Methodist Church, an honorary member of the Optimist Club, and a Mason. A daughter survives.

Hazlett A. Delcher, M.D., Toledo; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md., 1907; aged 57; former member of the Ohio State Medical Association and the American Medical Association; died March 3. Dr. Delcher had practiced in Toledo since 1918. He was a member of the Masonic Order. Surviving are his widow, a son—Dr. J. E. Dilcher, Toledo, and a daughter.

Albert Faller, M.D., Cincinnati; St. Louis University School of Medicine, 1902; aged 67; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 8. Dr. Faller was professor emeritus of contagious diseases at the University of Cincinnati College of Medicine. He retired 10 years ago after having served as head of the Cincinnati Tuberculosis Sanitorium, as pathologist at Jewish Hospital, and professor of clinical medicine at the University of Cincinnati. During the last World War, he was a captain in the Medical Corps of the U. S. Army. Surviving are a daughter, a son and three sisters.

Noah Gorsuch, M.D., Sunbury; Columbus Medical College, 1892; aged 81; former member of the Ohio State Medical Association and the American Medical Association; died March 31. Dr. Gorsuch practiced at Center Village for 32 years before moving to Sunbury 15 years ago. He had been president of the Bank of Galena Company for several years, and two years ago received his 50-year jewel from the Masonic Lodge at New Albany. His widow, two sisters and four brothers survive.

Lester Edwin Hackbarth, M.D., Toledo; State University of Iowa College of Medicine, Iowa City, 1927; aged 43; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 31. Dr. Hackbarth practiced in Toledo for 12 years. He was a member of the Toledo and Flower Hospital staffs. Dr. Hackbarth was an active member of the Methodist Church. His widow, two sons, a daughter and his mother and a brother survive.

Frank E. Michener, M.D., Tiffin; Ohio Medical University, Columbus, 1898; aged 84; died April 6. Dr. Michener retired seven years ago, after having practiced 43 years in Delaware; Toledo; Alpena, Mich.; and Attica. He was a member of the Methodist Church. Surviving are his widow, a son and a sister.

Kenneth Earl Shaweker, M.D., Dover; New York University College of Medicine, New York, 1914; aged 53; former member of the Ohio State Medical Association and former Fellow of the American Medical Association and the American College of Surgeons; died March 20. Dr. Shaweker had been in ill health for the last five years and had retired from active practice two years ago. After extensive postgraduate training, Dr. Shaweker began practice in New Philadelphia. He enlisted in June, 1917, as a lieutenant in the Medical Corps of the U. S. Army, served overseas and was mustered out as a major in August, 1919. He then practiced in Dover until his retirement. Active in community affairs, he was particularly interested in musical organizations. Dr. Shaweker was a member of the American Legion, Kiwanis Club, Masonic Order, Elks Lodge and the Lutheran Church. Surviving are his widow, three daughters, a son, his mother, a sister and a brother—Dr. Max Shaweker, Dover.

William H. Smith, M.D., Cincinnati; Pulte Medical College, Cincinnati, 1896; aged 67; member of the Ohio State Medical Association and the American Medical Association; died March 22. Dr. Smith practiced in Cincinnati for 45 years. He was a member of the staff of Bethesda Hospital. His widow, three sons, a daughter and a brother survive.

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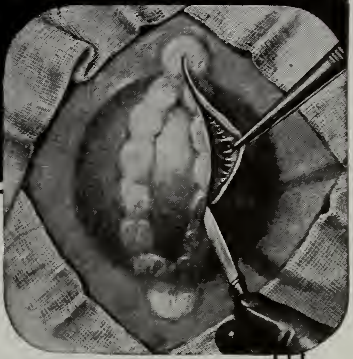

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Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

Members of the Adams County Medical Society met at West Union, Wednesday, April 16. The following program was presented: "Report of the Legislative Committeeman", Dr. S. J. Ellison, West Union; "Work of Examinations of Draftees", Dr. Sam Clark, Cherry Fork, with discussion by Dr. R. L. Lawwill; "Varicose Veins and Late Treatment", Dr. C. M. Carmichael, Maysville, Ky., with discussion by Dr. A. R. Carrigan, Manchester; "Local Anaesthesia in Teeth Extraction", Dr. L. E. Wilhide, West Union.—O. T. Sproull, M.D., secretary.

HAMILTON

The Academy of Medicine of Cincinnati presented the following programs during April:

April 1—"The Permission Necropsy: Its Purpose and Problems", Dr. Oscar T. Schultz, director of laboratories, St. Francis Hospital, Evanston, Ill.

April 8—Hospital Night. Case Reports arranged and presented by the staff of Children's Hospital. "A Case of Solid Tumor of the Ovary in a Girl 13 Years of Age", Dr. William T. McElhinney; "A Case of Recovery from Influenzal Meningitis", Dr. Aaron Schwinger; "A Case of Bacillary Dysentery Treated with Sulfaguanidine", Dr. Charles L. Wilber; "Treatment of Undescended Testes with Antuitrin-s", Dr. George K. Anderson; "Streptococcic Meningitis Treated with Sulfapyridine", Dr. Stewart C. Wagoner; "Hemorrhagic Disease of the Newborn Treated with Vitamin K", Dr. Sydney Gellis.

April 15—"Diagnosis and Treatment of Lesion of the Cranial Nerves", Dr. Walter E. Dandy, professor of neurological surgery, Johns Hopkins University School of Medicine, Baltimore, Md.

April 22—"Surgical Treatment of Burns", Dr. Vinton E. Siler; "Recent Advances in the Use of Sympathomimetic Drugs", Dr. Arnold Iglauer.

April 29—"The Present Status of Surgery of the Spleen", Dr. John de J. Pemberton, associate professor of surgery, The Mayo Foundation, Rochester, Minn.—Bulletin.

HIGHLAND

Dr. Robert A. Lyon, associate professor of pediatrics, University of Cincinnati College of Medicine, spoke on the perils of premature infants and the dangers confronting them during the first year of life, at a meeting of the Highland County Medical Society, Wednesday afternoon, April 9, at Greenfield.—News clipping.

The Woman's Auxiliary to the society held its regular luncheon meeting, Wednesday, April 2, at Hillsboro. The guest speaker was Mrs. James Hartman, Cincinnati, representing the Cincinnati and Hamilton County unit of the Women's Field Army for the Control of Cancer.—Mrs. W. B. Roads, secretary.

WARREN

"Recognizing Skin Cancer" was the subject discussed by Dr. Harry A. Nieman, Dayton, at a meeting of the Warren County Medical Society, Tuesday afternoon, April 1, at the Town Hall, Lebanon.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CHAMPAIGN

A group of physicians' wives held a meeting Friday evening, March 14, at the home of Mrs. L. A. Woodburn, Urbana, for the purpose of forming a Woman's Auxiliary to the Champaign County Medical Society. Officers will be chosen later when more definite plans have been completed.—News clipping.

DARKE

Dr. Vinton E. Siler, Cincinnati, spoke on "Surgical Treatment of Burns" at a dinner meeting of the Darke County Medical Society, Tuesday, April 15, at Greenville.—W. D. Bishop, M.D., secretary.

GREENE

"Recent Advances in Virus Research" was the topic presented by Carl Duffy, Ph.D., of the Department of Research, Children's Hospital, Cincinnati, at a meeting of the Greene County Medical Society, Thursday, April 3, at Xenia. Dr. Duffy gave an excellent lecture.—Donald F. Kyle, M.D., secretary.

MIAMI

A meeting of the Miami County Medical Society was held at Stouder Hospital, Troy, Friday afternoon, April 4. Following a presentation of case reports by members, Dr. J. F. Beachler, Piqua, gave a talk on "Diagnosis and Treatment of Gall Bladder Disease".—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

Dr. Harry Goldblatt, professor of experimental pathology, Western Reserve University School of Medicine, Cleveland, spoke on "Experimental Observations in Essential Hypertension", at a

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meeting of the Montgomery County Medical Society, Friday evening, April 4, at Dayton.

"Relationship of the Medical Business Bureau to the Scientific Society" was the subject discussed by Stanley R. Mauck, executive secretary, Columbus Academy of Medicine and executive director of the Columbus Bureau of Medical Economics, at a meeting of the society, Friday evening, April 18.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

AUGLAIZE

"Phases of the Cardiac Cycle, Its Relationship to Pathological Changes" was the subject presented by Dr. Dale P. Osborn, Cincinnati, at a meeting of the Auglaize County Medical Society, Thursday evening, April 10, at Wapakoneta. The discussion was opened by Dr. Fred G. Maurer, Lima.—Chas. C. Berlin, M.D., secretary.

CRAWFORD

Dr. D. M. Glover, Cleveland, was guest speaker at a meeting of the Crawford County Medical Society, Monday, April 7, at Bucyrus. His topic was "Inflammatory and Malignant Lesions of the Colon", and was supplemented by case presentations by local physicians. The meeting was attended by members of the Woman's Auxiliary and also members of the Richland and Marion County Medical Societies.—J. W. Arnold, M.D., secretary.

MARION

Dr. J. Grant Marthens, Dayton, spoke on "Diagnosis and Treatment of Syphilis" at a meeting of the Marion County Academy of Medicine, Tuesday night, April 1, at City Hospital, Marion.—News clipping.

WYANDOT

"Sulfanilamide" was the subject of a talk made by Dr. Maurice A. Schnitker, Toledo, at a meeting of the Wyandot County Medical Society, Thursday evening, March 27, at Upper Sandusky. —News clipping.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

HENRY

Dr. Kinsley Renshaw, Toledo, addressed the Henry County Medical Society, Tuesday, April 15, at Napoleon, on "Acute Abdomen". The address was very much appreciated by all present.—G. M. Wright, M.D., president.

LUCAS

Among the scientific programs presented by the Toledo Academy of Medicine during April were the following:

April 11—Section of Pathology, Experimental Medicine and Bacteriology, "Symposium on War Injuries", Dr. B. J. Hein and Dr. E. J. McCormick.

April 18—Medical Section. Annual Clinic Day and Opening Mercy Hospital's New Addition. "Diseases of Peripheral Blood Vessels", Dr. E. V. Allen, Rochester, Minn.—Bulletin.

PUTNAM

R. A. Peterson, representative of the Eli Lilly Company, was the principal speaker at a meeting of the Putnam County Medical Society, Tuesday, March 4, at Ottawa. A former missionary in China, Mr. Peterson presented a graphic and vivid picture of China today. He said that both in a commercial and political sense, China is progressing much more rapidly than we realize, and that we must not underestimate the intelligence of the Chinese, nor their great importance as potential customers. China is not greatly worried about Japan, Mr. Peterson maintained, except as only a temporary annoyance and nuisance. With a stolid philosophy, which we of the West might well copy, China is rapidly educating her people and solving her problems, he said.

"Nephritides in Their Clinical and Pathological Aspects" was the topic discussed by Dr. John LoCricchio, Lima, at a meeting of the society, April 1, at Ottawa. A number of interesting and rare slides were shown, together with histories of cases observed by Dr. LoCricchio at Memorial and St. Rita's Hospitals, Lima.—H. N. Trumbull, M.D., correspondent for *The Journal.*

WOOD

Dr. Carl H. Bayha, Toledo, spoke on "Common Infections of the Nervous System" at a meeting

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., **23**, 201 (March), 1939.

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of the Wood County Medical Society, Thursday evening, March 20, at the Woman's Club, Bowling Green. Dr. Bayha discussed the newer methods of detecting various infections of the nervous system and recent developments in that field of therapy. He dwelt especially on the use of vitamins in these conditions, referring many times to actual case histories with results of treatment showing cause for much optimism in prognosis with the newer preparations. He also described the improved results made possible by chemotherapy in the several types of meningitis. The paper was eminently practical from the standpoint of the general practitioner and was greatly enjoyed by the members. Many questions were carefully answered.

Dr. C. E. Hufford, Toledo, was guest speaker at a meeting of the society, Thursday evening, April 17. Speaking on "X-Ray Interpretations", Dr. Hufford made the meeting a sort of clinical-pathological conference; reading a carefully-made case history, then throwing the X-ray on the screen and asking for interpretations. This method stimulated the interest of the members to a high degree and the final findings as discovered at autopsy or operations were discussed at length, making for a very informative session.—D. R. Barr, M.D., correspondent for *The Journal.*

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during April:

April 4—Clinical and Pathological Section. "Case of Myxoma of Heart", Dr. Richard Dexter and Dr. J. L. Work; "Case of Perforated Gastric Ulcer in Young Female", Dr. J. L. Kocour; "Case of Theca Cell Tumor", Dr. F. A. Spittler; "Case of Endometrial Sarcoma", Dr. C. R. Jablonoski; "Anatomical Demonstration and Lantern Slides on Sinus Pathology", Dr. F. W. Dixon.

April 9—Practice of Medicine Section. "Recent Advances in the Vitamin B Complex", Dr. R. K. Updegraff, Jr.; "Renal Complications of Sulfonamide Therapy", "Current Bronchopneumonia of Unusual Character and Undetermined Etiology", Dr. R. F. Parker.

April 11—Joint Meeting, Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "The Effect of Certain Drugs (Quinidine, Procaine, Potassium Chloride, Digitalis, Mecholyl, Adenylic Acid) on the Sensitivity of the Ventricles to Fibrillation", Dr. R. Wegria; "An Experimental Study of Repetitive Ectopic Discharges and Their Relation to Ventricular Tachycardia

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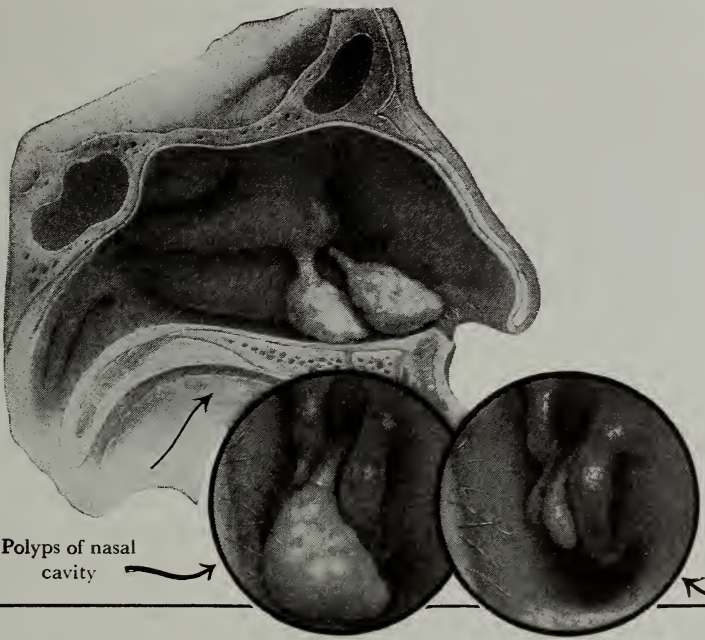

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April 16—Industrial Medicine and Orthopedic Section. "Control of Syphilis in Industry", Dr. E. A. Irvin; "Results of Operative Procedures for Low Back Pains in Workmen's Compensation Cases", Dr. H. P. Worstell, acting supervisor, Medical Section, State Industrial Commission.

April 18—Regular Academy Meeting. "Changes in the Coronary Circulation Resulting from Normal and Abnormal Processes", Dr. Joseph T. Wearn, professor of medicine, Western Reserve University School of Medicine.

April 23—Obstetrical and Gynecological Section. "Erythrocyte Sedimentation Rate During Pregnancy", Dr. Clifford C. J. Vogt, discussion opened by Dr. W. R. Barney; "Gynecological Tuberculosis with Case Report", Dr. Eduard Eichner, discussion opened by Dr. Marion Douglass.—Bulletin.

Dr. Ralph M. Watkins spoke on "Protecting the Interests of the Academy", and Dr. Abraham Strauss discussed "Medical Ethics as Interpreted by the Board of Censors", at a meeting of the Woman's Auxiliary to the Academy, Tuesday, March 11, at the Allen Memorial Library.—News clipping.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

COLUMBIANA

"Problems in the Endocrinology of Childhood" was the subject of an address made by Dr. T. O. Elterich, assistant professor of pediatrics, University of Pittsburgh School of Medicine, at a meeting of the Columbiana County Medical Society, Tuesday evening, April 8, at Lisbon.—News clipping.

PORTAGE

Members of the Portage County Medical Society met at Robinson Memorial Hospital, Ravena, Thursday evening, April 3. Dr. D. L. Beers, Warren, spoke on "Circulatory Disturbances". Those who attended were very much interested in the talk and took part in a general discussion.—Emily J. Widdecombe, M.D., secretary.

STARK

Dr. Fred W. Dixon, Cleveland, discussed "Facts and Fantasies in the Treatment of Sinusitis" at a meeting of the Stark County Medical Society, Thursday evening, April 10, at the Elk's Club, Canton.—Clair B. King, M.D., secretary.

SUMMIT

"The Surgical Treatment of Infections of the Face, Mouth and Neck" was the subject of an address made by Glenn Major, D.D.S., Pittsburgh,

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Kugelmass: "Newer Nutrition in Pediatric Practice."
J. B. Lippincott Co., Philadelphia, 1940, p. 334.

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***Ariyama & Takahasi,* Biochemische,**
Zeitschrift, vol. 216, p. 269, 1929.

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C. V. Mosby Co., St. Louis, 1930, p. 45.

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at a meeting of the Summit County Medical Society, Tuesday evening, April 1, at the Mayflower Hotel, Akron. Members of the Akron Dental Society were guests at the meeting.—Bulletin.

TRUMBULL

Members of the Trumbull County Medical Society, with their wives as guests, held a dinner meeting at the Hotel Warner, Warren, Thursday evening, March 20. The guest speaker was Dr. Louis J. Karnosh, associate clinical professor of nervous diseases, who spoke on "Psychopathic Personalities of Famous People".—News clipping.

Dr. Wm. M. Skipp, Youngstown, President of the Ohio State Medical Association, spoke on "Progress of Public Health in Recent Years" at a luncheon meeting of the Woman's Auxiliary to the Society, Tuesday, April 1, at the Hotel Warner, Warren.—News clipping.

Seventh District

(COUNCILOR: CARL GOEHRING, M.D., STEUBENVILLE)

BELMONT

One hundred fifty guests were present at a dessert-bridge party sponsored by the Woman's Auxiliary to the Belmont County Medical Society, at the residence of the Auxiliary president, Mrs. Richard H. Wilson, Martins Ferry, Thursday, March 20. As a result of the party, a gratifying sum was realized for the British Medical and Surgical Supply Relief.—News clipping.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

ATHENS

Lt. Col. Howard E. Boucher, chief medical officer for Ohio Selective Service Headquarters, was guest speaker at a meeting of the Athens County Medical Society, Tuesday, April 1, at Nelsonville. Representatives from both Athens County Draft Boards attended the meeting.—News clipping.

LICKING

"Public School Problems" was the subject of a talk by Paul B. Edwards, superintendent of the Newark Schools, Tuesday night, March 25, at a meeting of the Licking County Medical Society, at the high school, Newark.—News clipping.

MUSKINGUM

Dr. Margaret O'Neal, Dr. Fred Phillips, and Dr. W. D. Coffman were the speakers on a "Symposium on Appendicitis" presented at a meeting of the Muskingum County Academy of Medicine, Wednesday evening, April 2, at the University

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Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

SCIOTO

Dr. A. L. Berndt, city health commissioner, discussed the program of the Portsmouth Department of Health, at a meeting of the Hempstead Academy of Medicine, Monday evening, April 14, at the Portsmouth General Hospital.—Sol Asch, M.D., secretary.

Officers of the recently-organized Woman's Auxiliary to the Academy are: Mrs. S. L. Meltzer, president; Mrs. Oscar R. Micklethwait, vice-president; Mrs. Franklin C. Beeks, secretary; Mrs. Frank Siedenburg, treasurer.—News clipping.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

The Columbus Academy of Medicine presented the following programs during April:

April 7—"Adrenal Functions and the Use of Adrenal Preparations in Practice", Frank A. Hartman, Ph.D., professor of physiology and chairman of the department of physiology, Ohio State University.

April 21—"The Diagnosis and Treatment of Trauma to the Abdomen", Dr. Henry H. Schwarzell.

April 28—Section in General Medicine. "Studies in Human Fertility", a talking motion picture presented by the Ortho Products, Inc., Lnden, N. J. Members of the Columbus Dental Society and the Columbus Academy of Pharmacy were guests at the meeting.

The Columbus Press Club was host to the Academy, Thursday evening, April 3, at a "Clinical-Pathological Conference". It was the Press Club's second annual party for physicians.—Bulletin.

MADISON

Dr. William F. Mitchell, Columbus, spoke on "Allergy in General Practice", at a meeting of the Madison County Medical Society, Thursday evening, March 27, at the home of Dr. H. D. Wright, West Jefferson.—News clipping.

ROSS

Dr. W. N. "Jack" Taylor, Columbus, spoke on "Surgery of the Prostate Gland", at a meeting of the Ross County Academy of Medicine, Thursday evening, April 3, at Chillicothe.—News clipping.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

LORAIN

At a dinner meeting of the Lorain County Medical Society, Tuesday, April 8, at the Lorain Country Club, Dr. A. J. Beams, Cleveland, spoke on "A Few of the Difficult Problems in the Diagnosis and Treatment of Gastro-Intestinal Diseases".—L. H. Trufant, M.D., secretary.

RICHLAND

A symposium on "Heart Disease" was led by Dr. Stanley C. Schiller, Dr. Chas. L. Shafer, and Dr. Harro Woltmann, at a meeting of the Richland County Medical Society, Thursday afternoon, April 17, at the Mansfield General Hospital. A movie film on "Studies on Human Fertility" was also presented.—Geo. L. Evans, M.D., secretary.

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The Physician's Bookshelf

MacLeod's Physiology in Modern Medicine, edited by Philip Bard with nine collaborators. ($10.00. Ninth Edition. *C. V. Mosby Company, St. Louis).* Three years ago we reviewed the eighth edition. This ninth, has been largely rewritten by the group who did the eighth edition. A new face is that of Howard J. Curtis, also of Johns Hopkins, who writes of electrical excitation and conduction of the nerve impulse. After one has been out of medical school for a few years one must have a good up-to-date physiology written with the clinical in mind. This is the most recent and should take a place beside your latest Practice of Medicine.

An Introduction to Dermatology, by Richard Sutton, M.D., and Richard L. Sutton, Jr., M.D. ($9.00. Fourth Edition; 723 illustrations. *C. V. Mosby Company, St. Louis),* is condensed from the tenth edition of the authors' "Diseases of the Skin." Especially valuable are the new illustrations including those from the collection of Dr. Herman Pinkus on the anatomy of the skin.

Vital Facts About Foods, by Otto Carque *(Natural Brands, Inc., Glendale, California),* presents a somewhat biased view of matters of diet, in our opinion, over-emphasizing the place of alkaline salts and is trying to present a positive health program. Many aspersions are cast at medicine and many food fadists are quoted. There are 200 food recipes that are among the best I have ever tried. Especially am I speaking of the 46 vegetable salads and 10 salad dressings. All of us who keep advising our patients about the advantages of such salads are troubled by having them complain about their monotonous character. These recipes solve the whole problem for us and our patient.

Manual of Clinical Chemistry, by Miriam Reiner, M.Sc. ($3.00. *Interscience Publishers, Inc., New York),* presents the methods used at Mt. Sinai in New York. Its arrangement and method of presenting the directions makes this the most serviceable book of its kind I have seen.

Pathology of the Central Nervous System, by Cyril B. Courville, M.D. ($5.75. *Pacific Press Publishing Assn.),* presents the lessons gained in a series of 15,000 autopsies at Los Angeles County Hospital. An interesting and valuable text, well designed and well printed.

The American College of Physicians, by its Historian, William Gerry Morgan, M.D. (published by *The College, Philadelphia),* tells the story of the past 25 years of this American institution. Most of us are not familiar with the revolution which occurred in this society in 1926 in which the College was taken over by the aca-

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SCURVY first attracted attention when men began to make long sea voyages. The 16th century explorer, Jacques Cartier, described it and told how it was cured by having his men drink an infusion of the leaves and bark of the Ameda tree. Nevertheless it remained a serious problem in the British Navy until the middle of the 18th century when James Lind wrote his *Treatise on Scurvy.* Through Lind's observations and influence it was virtually eliminated as a plague among British sailors by providing them with lemons or other citrus fruit.

A forward step was made in 1907 by Holst and Frölich who found that the guinea pig could be used experimentally for the study of scurvy. It was not until 1932, however, that the isolation of hexuronic (ascorbic) acid was announced almost simultaneously by Waugh and King in the United States and by Svirbely and Szent-Györgyi in Hungary. First obtained from the adrenal cortex of animals and from cabbage leaves, it has since been found widely in plant and animal tissues.

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demicians. Since then it has done much for postgraduate instruction of its members, contributed to the regimentation of American physicians, and provided a sounding board for the committee of 400. For all who want to read the story of the College, they will find it all told frankly and well in this well printed volume.

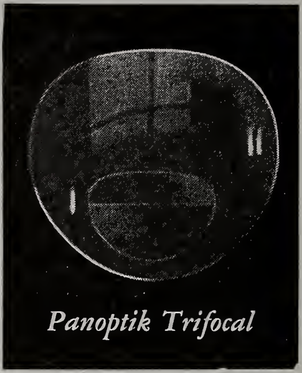
The 1940 Year Book of Dermatology and Syphilology, by Fred Wise, M.D., and Marion B. Sulzberger, M.D. ($4.50. *The Year Book Publishers, Chicago)*, is 10 per cent larger than any previous issue, marking the fortieth anniversary of this popular series. All of those who know this annual review look forward to its introductory feature and this is the best of all—a 63-page monograph of Psoriasis and its treatment for the physician who is not a dermatologist.

Manual of Physical Diagnosis, by Maurice Levison and Ellis B. Freilich with the collaboration of George C. Coe ($3.00. *Year Book Publishers, Inc., Chicago)*, is an elaboration into the manual of the outline used at University of Illinois. It is characterized by its clarity and simplicity. As such, students and physicians will find it a very useful reference.

Doctors and Doctors, Wise and Otherwise, by Charles M. Rosser, M.D. ($3.50. *Mathis, Van Nort, Dallas, Texas)*, is the story of Dallas Medicine for the last 50 years, told by the man who made much of it, in the first person so that it is nearly an autobiography. From Dallas, the author takes us to many a medical convention and gives us a good picture of Ochsner, Murphy, Charles and William Mayo. Many anecdotes are told—often dragged in—but it is all very entertaining. I haven't enjoy a tale as I have this one since my grandfather taught me his version of the war of the Rebellion.

One Enduring Purpose, by Henry and Sylvia Lieferant ($2.00 *E. P. Dutton & Company, New York)*, is the story of two brothers, Drs. Francis and Victor Knoll, by the authors of "Charity Patients" and "Doctors' Wives." One became a fashionable doctor in New York City and the other a country physician in their home town. The conflicts in ways of life and work makes a fascinating story and incidentally there is a painlessly administered dose of inspiration for any physician or his wife who will but read the novel.

Report on the Sex Question, by the Swedish Population Commission ($2.00. *National Committee on Maternal Health, Inc., New York)*, presents a sane, judicial discussion of the decreasing birth rate among Swedish married couples; much greater illegitimate birth; the importance of abolition of prostitution regulations and control; correlation with industrialization of the country; the problem of venereal disease; the



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ethical and economical aspects of contraception. All who are interested in population declines should read this book, as well as those who think that Scandinavian countries have solved the food, housing, income problem.

A Surgeon Reflects, by James T. Nix, M.D. ($2.00. *Louisiana State University Press, University, Louisiana)*, is a series of informal essays by the well known teacher-surgeon. A good inspirational type of book to put in the hands of a medical student or young physician. It will appeal to any intelligent reader.

Marriage and Divorce Laws Simplified, by Richard V. Maskey, LL.B., LL.M., member of New York Bar ($0.50. *Phillips Law Book Co., 500 Fifth Ave., New York)*, explains and illustrates these laws; procedure and causes of action in all states of the Union.

Hemorrhagic Diseases. Photo-electric study of Blood Coagulability, by Kaare K. Nygaard, M. D. ($5.50. *C. V. Mosby Company, St. Louis)*, deals with the practical problems frequently confronting the surgeon in gallblader diseases and other hemorrhagic conditions as well as the physician who is confronted with hemophelia, thrombocytopenic purpura, and hypothrombinemia hemorrhagica neonatorium. Before dealing with these practical problems, he discusses thoroughly the physiology of blood clotting and his own investigations of these problems.

Anus, Rectum, Sigmoid, Colon. Diagnosis and Treatment, by Harry Ellicott Bacon, M.D. ($8.50. Second Edition. *J. B. Lippincott Company)*, has proven its worth by exhausting the first edition in less than two years. This work is a comprehensive monograph intended for all divisions of medical practice. Its value is greatly enhanced by 507 illustrations mostly original ones from the pen of William Brown McNett. An excellent book for your library.

The Endocrine Function of Iodine, by William Thomas Salter, M.D. ($3.50. *Harvard University Press, Cambridge, Mass.)*, presents the function of this element as an important bridge between biochemistry and endocrinology. As the first volume in a new series of monographs to be published by Harvard, it sets a very high standard.

Electrocardiography in Practice, by Ashton Graybiel, M.D., and Paul D. White, M.D. ($6.00. *W. B. Saunders Company, Philadelphia)* tells in a few brief chapters and 272 illustrations the empirical story of this new instrument. There are 142 tracings with their histories representing normal variations, the several disorders of rhythm and the etiological types of heart disease. These are followed with 130 tracings for practice interpretations. Truly an excellent P-G course for a very small fee.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 June, 1941 No. 6

JONATHAN FORMAN, M.D., *Editor*

CHARLES S. NELSON, *Managing Editor* ALICE B. HANEY, *Advertising Manager*

GEORGE H. SAVILLE, *News Editor*

Pneumonia Studies

Five Years Experiences

JULIEN E. BENJAMIN, M.D. and JAMES M. RUEGSEGGER, M.D.

THE modern methods employed in the diagnosis and treatment of the pneumonias were studied early in Cincinnati. In 1933, not quite two years after Cooper's complete classification, typing of each case of acute pneumonia in the Cincinnati General Hospital was begun. The only method recommended at that time was the microscopic agglutination method developed by Sabin, which required the use of mice for growing the organism in sufficient numbers to make the determination. It was somewhat arduous and time consuming and not without errors of an intrinsic and extrinsic nature. Very little interest surrounded the studies at this time and for several good reasons.

In the first place it was considered purely a diagnostic procedure of considerable academic but little practical importance. The medical world still viewed pneumonia as a serious and highly fatal disease in general hospital practice as apart from private practice. The diagnosis on a purely anatomic basis was deemed the epitome of skill in diagnosis and the outcome conjectural. In the second place, no reliable therapeutic agent was at hand, except a questionable unrefined serum for one or two types, and this on an experimental basis. Clinicians had been deluded so often in their use of specifics for pneumonia that any new remedy was viewed with suspicion. Therefore, the feeling arose of letting others pioneer and allowing results to be the sole criteria of acceptance.

Then, later even, when Sabin perfected the quellung typing method, and reduced immeasurably the time needed in rendering an accurate diagnosis, the method, although relatively simple, required the skill only to be found in a highly trained technician. The routine was not consistent with the equipment of a clinician's office.

Finally and unfortunately, refined, specific sera did not appear simultaneously for all types and thus clinicians were not infrequently faced with the dilemma of extreme accuracy in diagnosis but no obtainable serum for the particular confronting type. Not until specific, reliable sera existed for each type did this specific method of treating patients receive vigorous attention. True enough, expense was a serious deterrent in the use of serum, and also the possibility of much dreaded serum reaction, but very gradually the value of the serum treatment of the pneumonias

The Authors

- Dr. Benjamin, Cincinnati, Ohio, is a graduate of the University of Cincinnati College of Medicine, 1912; member American College of Physicians; American Board of Internal Medicine, American Heart Association; Central Society for Clinical Research; director outpatient dispensary, Cincinnati General Hospital; attending physician, Jewish and Cincinnati General Hospitals; associate professor of medicine, University of Cincinnati College of Medicine.

- Dr. Ruegsegger, Cincinnati, Ohio, is a graduate of Western Reserve University School of Medicine, 1931; member Central Society for Clinical Research; instructor in medicine at University of Cincinnati College of Medicine.

Submitted March 25, 1941.

was accepted and results did speak for themselves.

There seems as yet no adequate explanation as to why certain localities experience high pneumonia incidence and mortality and others not far distant are more fortunate. For years Cincinnati has had a bad record for pneumonia deaths. Up to 1938, there occurred in metropolitan Cincinnati upward of 400 reported deaths annually from the disease, representing a mortality rate of 89.0 per 100,000 population. Morbidity rates are practically impossible to obtain in any city. Only recently has real effort been made to induce physicians to report acute pneumococcic infections. The Cincinnati General Hospital in reviewing its experience over a period of six years[1] from 1924-30, found that the crude percentage of deaths varied between 30 to 50 per cent. This was prior to the general use of serum. There are received annually at the Cincinnati General Hospital, between 400 and 500 patients with acute pneumococcic infection. Beginning in a somewhat humble fashion in October, 1935, the sputum from each case of suspected pneumonia admitted to the hospital, was promptly typed, mouse transplants made, and blood cultures and radiograms taken.

In prosecuting the work, blood cultures, largely emphasized by Bullowa, were considered of prime importance. It is now conceded that the severity of a pneumococcus infection is in direct relation to the extent of blood stream infection. This was and is the determining factor in serum dosage, and now, chemical dosage, as well. In the beginning of our work, the importance of early diagnosis and serum administration was stressed and it may be of interest to set forth at this point our criteria for establishing the diagnosis of early cases.

1. Typical acute cases (early)
    (a) Sudden onset-chill, pain, fever, cough, rusty sputum.
    (b) Typing of sputum.
2. Atypical and late cases.
    (a) History upper respiratory infection with sudden change as under (a) above.
    (b) Physical examination indicating consolidation.
    (c) Typing of sputum.
    (d) X-ray in all doubtful cases.

Only cases sick 96 hours or less were treated, because of the possibility of a spontaneous crisis occurring after that time, and also, the cost of serum.*

During the winter of 1934-5 pneumococcus typing techniques were studied and practiced, and October 1, 1935, the first organized plan in our campaign against the pneumonias was started. A liberal grant from Mrs. Lilly Fleishman enabled us to establish the Craig Yeiser Pneumonia Research Laboratory, without which it is doubtful that the early results would have proved so gratifying. Dr. James M. Ruegsegger was appointed director of the laboratory in September, 1936.

A review of the first 10 months of work[2] reported at the annual meeting of the Ohio State Medical Association, revealed some very encouraging data. A total of 282 cases were treated as follows:

October 1, 1935—August 1, 1936.

	No. of Cases	Deaths	
White	134	27	9.6 %
Colored	148	38	13.5 %
Male	219	46	16.3 %
Female	63	19	6.7 %
Total	282	65	23.06%

These figures were the crude mortality rate of all cases, those treated with serum and others treated expectantly. Thus, not an impressive result when calculated in this way, but when a comparison was drawn of cases whose serum treatment was begun within 96 hours of onset and of cases not serum treated, the data appeared more significant:

1935-1936

Treated with serum		
No. of cases	149	
Deaths	14	9.39%
Not treated with serum		
No. of cases	139	
Deaths	52	37.3%

Certainly this was cause for great enthusiasm, the more so, since commercial serum was then available for Types I, II, V, VII and VIII. Through the courtesy of Dr. Jesse G. M. Bullowa serum was procured for types VI, IX, and XIV in limited amounts.

Distributed by types the serum treated cases appeared in the following manner:

	No. of Cases	
Type I	112	39.7%
" II	21	7.4%
" V	32	11.3%
" VI	5	1.7%
" VII	19	6.7%
" VIII	12	4.3%
" IX	4	1.4%
" XIV	4	1.4%
Total		73.9%

Type I infections led in frequency by a considerable margin (39.7%), and eight types accounted for 73.9% of the total cases studied.

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*Attention is directed to the almost prohibitive cost of sera five years ago, especially for the types encountered less frequently. Happily there has been a gradual decline in price until at the present time the cost has been reduced more than one third. Assuming that 100,000 units is the average amount needed for each patient, five years ago it cost the General Hospital $42.00 per patient, while today $24.50 pays for the treatment. This price does not hold good for private hospitals or private patients. The cost to an individual is still very high running usually about $50.00 where formally however, it was nearly $75.00. Today serum is obtainable for every known type, the price now being almost uniform for all types.

The data were further analyzed with reference to our experience with Type I infection, because it was by far the commonest offender and not by any means a mild invader. This led to a discovery of the first importance, since attention was directed to the matter of adequate dosage, a great step in cutting down mortality. It was possible to report the following findings:

Type I

October 1, 1935-August 1, 1936

Treated within 96 hours with at least 40,000 units		
Number of patients	50	
Deaths	0	
Treated later or with less than 40,000 units		
Number of patients	36	
Deaths	7	18.9%
Not treated with serum		
Number of patients	28	
Deaths	8	28.5%

Of greatest interest was the fact that of 50 individuals, colored and white, for the most part from the lower economic levels, treated early and adequately, not one death occurred. Our experience with these 50 cases very naturally led us to the conclusion that possibly a new day had dawned for the medical world in the treatment of this disease. Each year one reads in the literature, accounts of gratifying reduction in the mortality from the pneumonias treated with modern refined specific serum, until at last it was possible by the most critical analysis of our results to report this satisfactory outcome in the treatment of a fairly large number of cases.

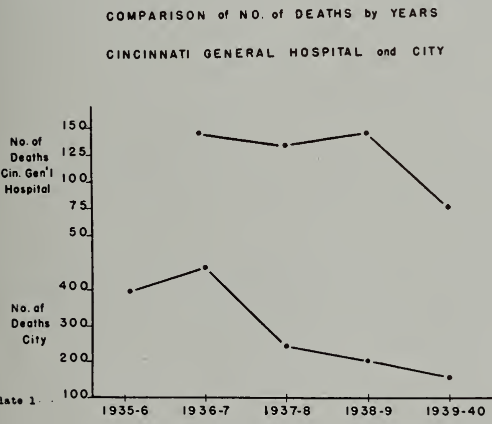

Plate 1

Studying the deaths in the cases receiving serum, it was concluded that, after discarding a few derelicts and patients with advanced degenerative diseases, for the most part these patients who died were either neglected during the early stages of their disease or that the importance of the early care of pneumonia was not generally appreciated. It appeared that a well directed campaign of health education could be of inestimable value and that it was not too much to believe that acute lobar pneumonias, for which there was curative serum, if specifically diagnosed and treated early, should within the next few years, be relegated to that group of diseases entailing a very immaterial death rate. This expression of wishful thinking was uttered in October, 1936. The course of events moved along with striking rapidity. By July, 1937, there had been observed 620 patients with acute specific infections. Still the procedure was pursued of treating only early cases. One hundred and seventy-three patients in this category experienced a death rate of only 11 per cent (19 deaths). Among 252 cases non-serum treated there were 85 deaths, or a rate of 35 per cent. For the remainder of the 620 patients serum was still not commercially available. Our observations had impressed us with certain interesting and important aspects of the disease. Giving adequate amounts of serum relentlessly until definite signs of improvement appeared, was strongly emphasized. The introduction into the blood stream of foreign protein in such quantities produced very few unfavorable reactions. Indeed we were amazed at the negligible number of thermal reactions and instances of serum sickness. This was doubtless due to the fact that the new concentrated and highly purified therapeutic serum was used. In all we observed in the first two years, 23 cases of serum sickness, and 19 cases which showed immediate reactions to serum, eight slight, nine moderate, and two severe. In one instance of a severe reaction the use of serum was possibly contraindicated by a mildly positive skin test to horse serum.

In almost all favorable cases, very soon after the administration of serum, the patient's general condition improved. Cyanosis became less, the pulse rate usually fell, and respiration appeared less arduous. Then followed gradually a lowering of temperature, amelioration of other symptoms and within a few days the patient returned to a normal condition. The detoxifying effect of serum was frequently prompt and startling, and there was rarely extension of the lung lesion. Further, its sterilizing effect on bacteremia was extremely noteworthy.

EFFECT ON RESOLUTION

While the administration of serum caused no change in the rate of resolution of affected lung tissues, there was no evidence that this process was interfered with or delayed. Certainly those individuals successfully treated remained in the hospital for a much shorter time than those non-serum treated. The days of intense suffering were also materially reduced.

EFFECT ON MORTALITY

The final test of the effectiveness of immune serum must rest on the evidence concerning the saving of lives. While the studies reported at this

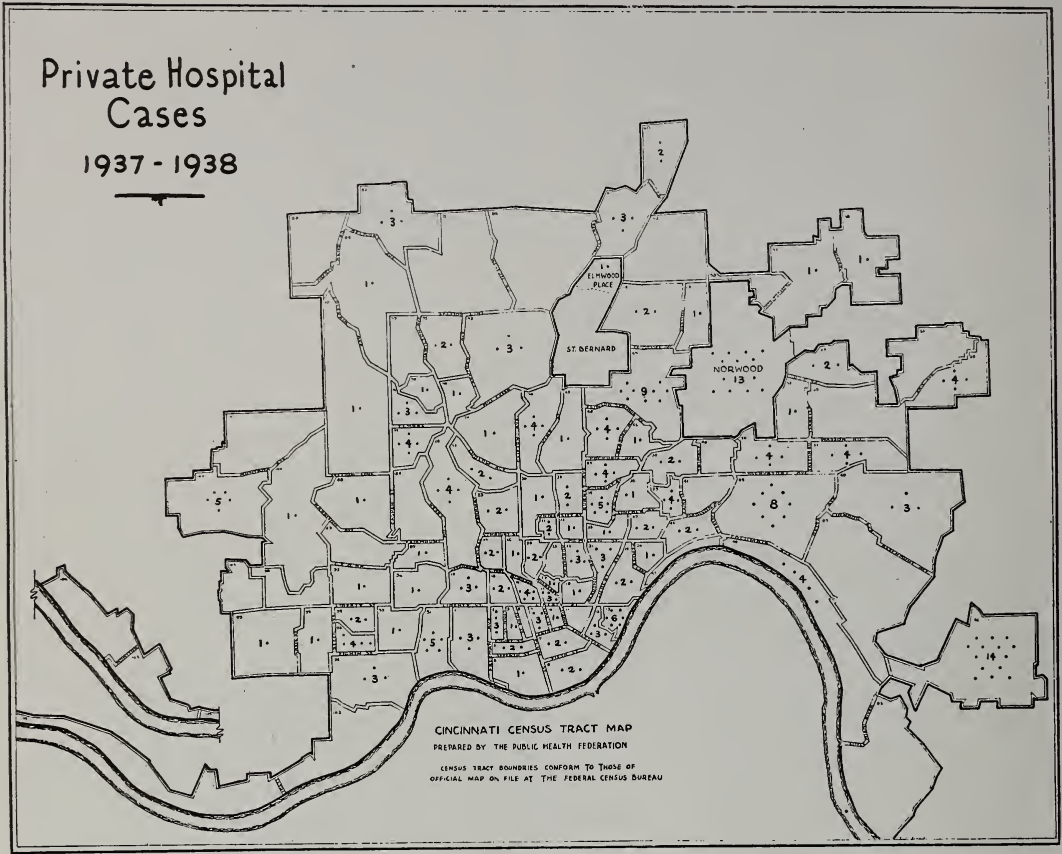
Private Hospital Cases
1937 - 1938
ELMWOOD PLACE
ST. BERNARD
NORWOOD 13
CINCINNATI CENSUS TRACT MAP
PREPARED BY THE PUBLIC HEALTH FEDERATION
CENSUS TRACT BOUNDRIES CONFORM TO THOSE OF OFFICIAL MAP ON FILE AT THE FEDERAL CENSUS BUREAU

Plate 2. Each dot represents one case of pneumonia. The numerals signify the number of pneumonia cases in each census tract, treated in private hospitals in 1937-1938.

time did not represent a very large number of cases, the results compared most favorably with those reported by other observers. Undoubtedly the saving in lives was greatest in Type I infections; but in the other types as well the lowering of mortality rates of serum treated cases as against non-serum treated cases, was definite. It was not too radical to conclude that "no patient with Type I infection who dies without early intravenous administration of large doses of Type I serum, could be said to have received the best treatment". There was abundant evidence that potent immune serum existed for types which together comprised 65 per cent of all lobar pneumonia. It was hardly adequate medical treatment if so many lives continued to be needlessly sacrificed.

In his discussion of our first report at a meeting in Cleveland, October, 1936,[2] Rogers stated that there occurred annually in Ohio at that time, in the vicinity of 3,000 deaths from lobar pneumonia, indicating about 12,000 cases, computed according to four patients affected for every death reported. Of the 12,000 cases 65 per cent, or 7,800 cases he assumed were due to Type I, II, V, VII and VIII. On the basis of the accepted knowledge of the potential effect of serum, he estimated that 1,400 lives might be saved, a reduction of 46 per cent in the mortality from this disease. Although Rogers, for a variety of reasons, considered it improbable that this goal could be attained in the near future, we have in Cincinnati today exceeded his expectations, as the number of deaths from lobar pneumonia in the entire city, has been reduced from 396 deaths in 1935-6 to 157 deaths in 1939-40. (Plate 1).

The difficulties in our path were largely those of lay education and public health organization. It was gratifying to note that the states of New York, Massachusetts, Connecticut, Michigan and many others were then well organized in their approach to the prevention and specific treatment of the pneumonias. Facilities for prompt typing of sputum as well as appropriations for the purchase of serum for the indigent, existed as an important plank in their campaign against preventable and curable diseases. While only specific serum for Type I and II was at first available, many of the states had increased their funds so as to include serum for all the commoner types. This represented a progressive attitude on the part of public health officials.

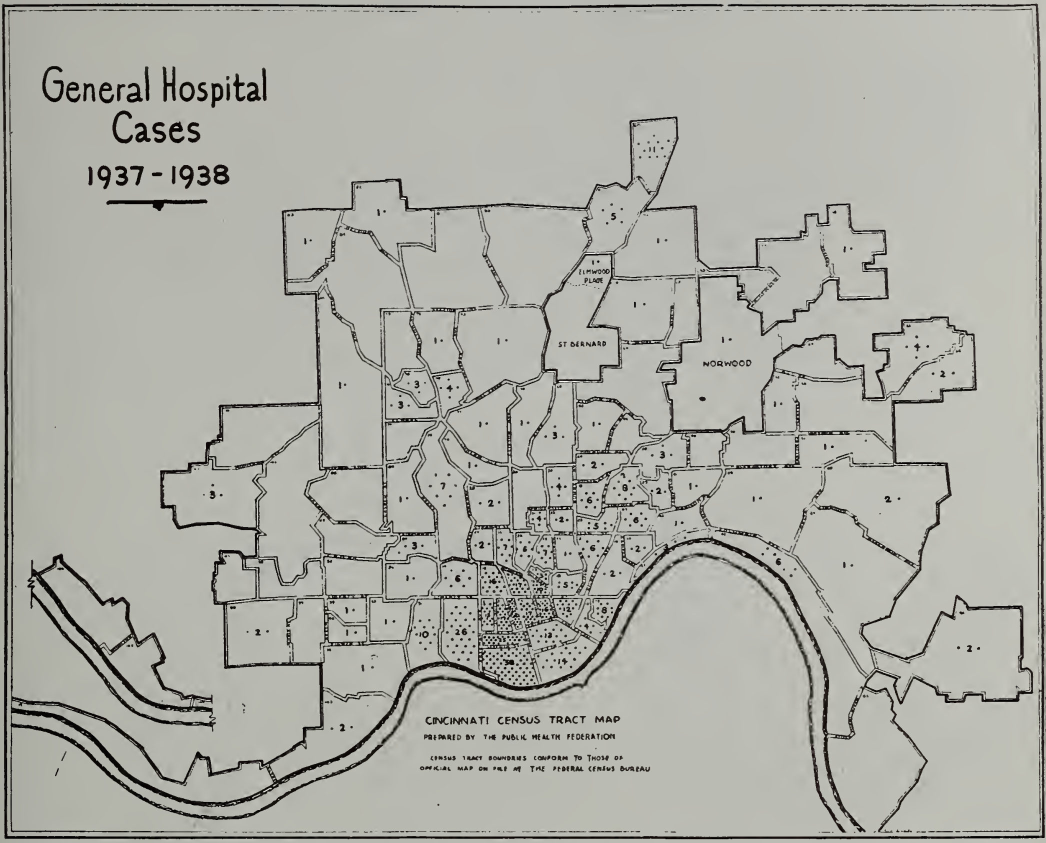
General Hospital
Cases
1937 - 1938
ELMWOOD PLACE
ST BERNARD
NORWOOD
26
38
CINCINNATI CENSUS TRACT MAP
PREPARED BY THE PUBLIC HEALTH FEDERATION
CENSUS TRACT BOUNDRIES CONFORM TO THOSE OF
OFFICIAL MAP ON FILE AT THE FEDERAL CENSUS BUREAU

Plate 3. Each dot represents one case of pneumonia. The numerals signify the number of pneumonia cases in each census tract, treated at the General Hospital in 1937-1938.

Undoubtedly great reduction in pneumonia mortality has been the result of their efforts. The educational pamphlets distributed to the public and the profession by these officials have gone far toward rounding out their program of prevention.

The results reported in Cincinnati had now interested the Director of Health of the State of Ohio. He requested a state appropriation for the purpose of training technicians from various localities in the State, in the technique of pneumococcus typing. This resulted in 40 physicians, nurses, and laboratory technicians coming to the Yeiser Pneumonia Laboratory for a period of one week, during which time intensive training was pursued. By 1938 there were in the state an increasing number of individuals skilled in typing and soon there was also a limited state fund for the purchase of serum for indigent patients. Thus Ohio swung in line in offering state aid in the campaign against the disease.

In Cincinnati a vigorous public health educational program was launched. This was inaugurated under the aegis of the Academy of Medicine, the local Board of Health, the Public Health Federation and the Department of Internal Medicine Cincinnati General Hospital. Posters and leaflets were exhibited and distributed and lectures given, urging persons to seek medical advice when colds suddenly "get worse" and telling about new hopes to be realized if pneumonia is treated early and efficiently. Physicians were invited to come to the Cincinnati General Hospital to observe the methods of typing and administration of serum. In a very short while interest was keen and the newer methods of treating the pneumonias became generally accepted.

Examining our experiences of the first two years with the pneumonias, the contagious aspect of the disease seemed a point of considerable interest.[3] In the winter of the first year (1935-6) we noticed that 56 cases of Type I pneumonia were sent to the Cincinnati General Hospital from two rooming houses for the care of homeless men. In these two buildings which were merely lofts made ready for emergency use during the peak of the economic depression, there was unusual overcrowding. This seemed certain evidence that the disease was transmitted from one patient to the other. Then in the second year (1936-7) during the period when admissions to

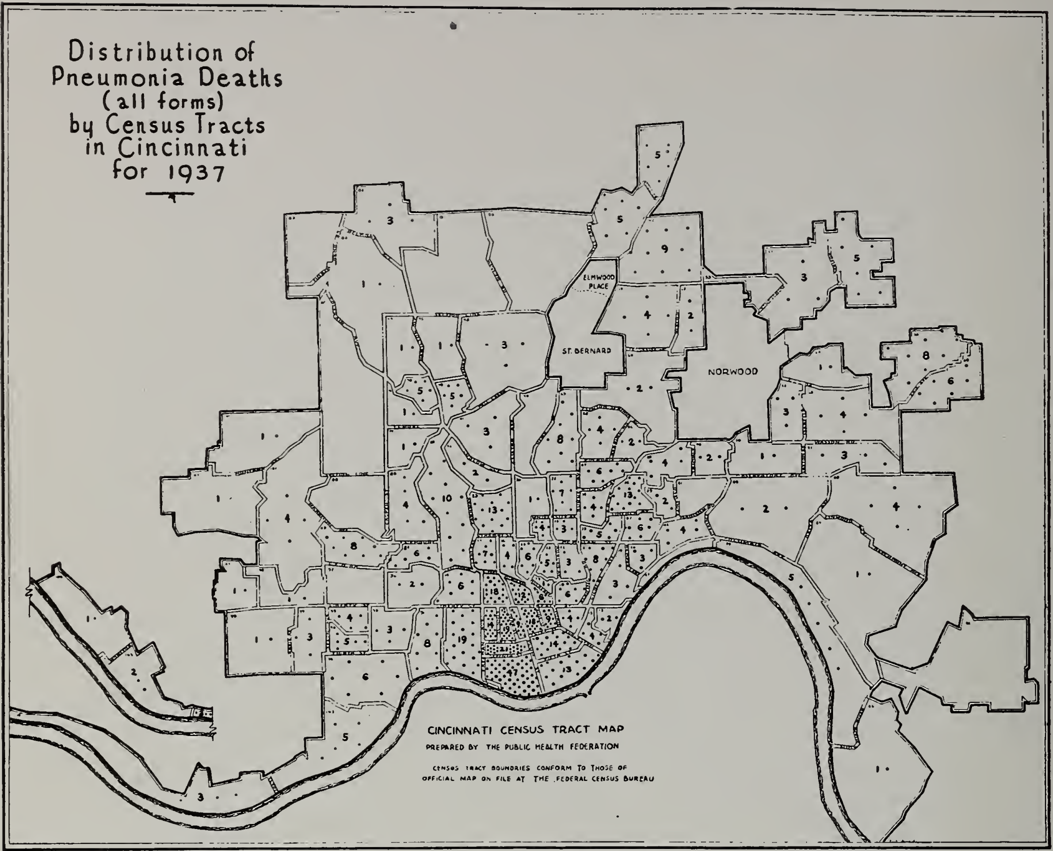
Distribution of Pneumonia Deaths (all forms) by Census Tracts in Cincinnati for 1937
ELMWOOD PLACE
ST. BERNARD
NORWOOD
CINCINNATI CENSUS TRACT MAP
PREPARED BY THE PUBLIC HEALTH FEDERATION
CENSUS TRACT BOUNDARIES CONFORM TO THOSE OF OFFICIAL MAP ON FILE AT THE FEDERAL CENSUS BUREAU

Plate 4. Each dot represents one pneumonia death. The numerals signify the number of pneumonia deaths for Cincinnati, in each census tract, 1937.

the hospital were extremely high and the wards overcrowded, it was observed that many patients in the hospital contracted pneumonia, while they were being treated for other conditions. In every instance their pneumonia could be traced to a patient with the homologous type lying in a near-by bed. The chart of 13 patients' cross infection from this year as well as two from the following year is herewith included as these incidents brought out the fact very forcibly, that pneumonia is a contagious disease, and led to the institution of its treatment as such in the hospital wards, thus avoiding similar occurrences thereafter. Convinced of the merit of this regulation, the example set by the Cincinnati General Hospital has been followed by all the private hospitals of the city. Overcrowding of wards is no longer tolerated.

Further data on the contagiousness of the pneumonias were brought out from the histories of other cases. Here we found cross infection from the patient to examining physician, from patient to nurse, from patient returning from the hospital to members of the family at home; contraction of pneumonia by laboratory workers who had been careless in the handling of infectious material, and a surprisingly large number of simultaneous admissions of homologous types of members of the same family. From such striking evidence it was concluded that pneumonia should be treated as a communicable disease in the home as well as in the hospital and as a public health problem in the city. We advocated the reporting of all cases by type. The observation of the overcrowding factor as contributing to the spread of pneumonia in the rooming houses and in the wards suggested that it might also influence the incidence of the disease in the city at large.

Therefore the addresses of each patient treated at the Cincinnati General Hospital as well as those cared for at private hospitals, and also each death reported to the department of vital statistics were "spotted" on Cincinnati Census Tract maps. (Plates 2, 3, 4)* Analysis of these maps directed our attention to the fact that a few tracts in the city contributed a preponderance of pneumonia cases each year.[4] The tracts represent that part of the city where people live

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*Spot maps for the years 1935-36; 1936-37; 1938-39; 1939-40; are not published in this paper. The massing of cases was essentially the same.

CINCINNATI GENERAL HOSPITAL
CASES OF PNEUMOCOCCIC CROSS-INFECTION

July 1, 1936 to July 1, 1938

The diagnosis given is the reason for hospitalization

Case	Color	Sex	Age		Hospital Day that pneumonia developed	Previous temp.	Temp. on sudden rise	Typing of Sputum	Treatment	Result
F.B. 68764	w	f	56	Luetic Heart Disease	3rd	99	101	Pn. I	Serum	Died
W.B. 63746	c	m	41	Cardiac Failure and Asthma	5th	100	104	Pn. II	Serum	Died
A.S. 62701	c	m	28	Periarteritis Nodosum	33rd	101	104	Pn. II	Serum	Died
D.P. 66381	w	f	31	U.R.I. Pregnancy six months	6th	101	103	Pn. II	Serum	Recovered
W.M. 93001	c	m	29	Prostatitis and Cystitis	20th	98 sub	106	Pn. II	Serum	Recovered
J.S. 66080	c	m	48	Bronchial Asthma	20th	100	104	Pn. II	Serum	Recovered
C.P. 66062	w	m	18	Heart Disease Acute Rheumatic Fever	23rd	sub	104 Crisis	Pn. II	Serum	Recovered
				Second Infection	31st		104	Pn. III		Recovered
O.H. 66502	w	f	62	Chronic Bronchial Asthma	7th	98	102	Pn. III	Serum	Died
S.H. 65735	w	f	65	Cardiac Failure Diabetes	27th	100 98	102	Pn. VII	Serum	Recovered
E.C. 65834	c	f	44	Vincent's Infection	5th	104 X-Ray neg.	105 X-Ray pos.	Pn. VII	Serum	Recovered
J.B. 67601	w	m	68	Heart Disease	11th	101	104	Pn. VII	Serum	Died
J.F. 86031	w	m	73	Cardiac Failure	24th	100	103	Pn. VII		Died
W.O. 61905	w	m	47	Abdominal Malignancy	42nd	98	103	Pn. VIII	Serum	Recovered
T.H. 74420	w	m	40	Diabetic Coma	7th	98	103	Pn. VIII		Recovered
J.P. 71340	c	m	40	Meningo Vasc. Lues.	3rd	100	104	Pn. XIX		Recovered

under congested conditions, the previously noted factor of importance in the spread of the disease. Other parts of the city where poverty was as dire but where congestion in living quarters was not acute, the pneumonia incidence compared favorably with the city at large. This study has engaged the interest of the U. S. Public Health Service, and it is not improbable that an experiment in mass immunization may be conducted in one of these tracts by this department. The recent methods employed by Felton[5] in C.C.C. Camps are being considered in this connection.

CHEMOTHERAPY

Thus the studies bring us to the year of 1940, about five years since they began, and with it the addition to our armamentarium of another valuable therapeutic agent. Although the results in the treatment of the pneumonias by a type specific serum gave every promise of eventually solving the problem of this serious disease, it was at all times quite apparent that the diagnosis and treatment of patients sick with pneumonia presented untold difficulties to be solved only by those who were very close to the subject, to say nothing of the great expense involved in administering such quantities of serum. Only a portion of the United States had reliable typing procedures, the indispensable adjunct of serum therapy. Then, too, the purchase of serum was at all times a serious problem for individuals who could not afford it, and only a few communities made such medical provision for the underprivileged. It was therefore fortunate that chemotherapy made its appearance in 1938. The dye sulfanilamide and its derivatives, and their application to patients with pneumococcal infections was discussed in the literature in the year of 1938. Evans and Gaisford[6] presented the dangers inherent in these drugs, but despite this it appeared for a while that sulfapyridine was to be used to the exclusion of other methods of therapy. It therefore seemed necessary to compare the efficiency of this drug with type specific anti-pneumococcic serum. The alternate* case method was employed and case records were kept for a period of six months. Only those pneumonias of less than 120 hours were included in this study.[7] In this group were 94 patients, 29 males and 16 females serum treated, and 29 males and 20 females receiving sulfapyridine.

METHOD OF ADMINISTRATION

The sulfapyridine was given in initial doses of 2 grams, followed by 1 gram every four hours night and day. It was administered by mouth, crushed and suspended in water or milk. If vomiting occurred within 30 minutes, the dose was repeated. Blood sulfapyridine levels were taken at frequent intervals. The drug was continued until the patient had been afebrile two days, at which time it was abruptly stopped. Patients who received less than 8 grams of the drug were not included in the comparative study.

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*Two patients received horse serum; rabbit serum was administered to the remainder receiving specific therapy.

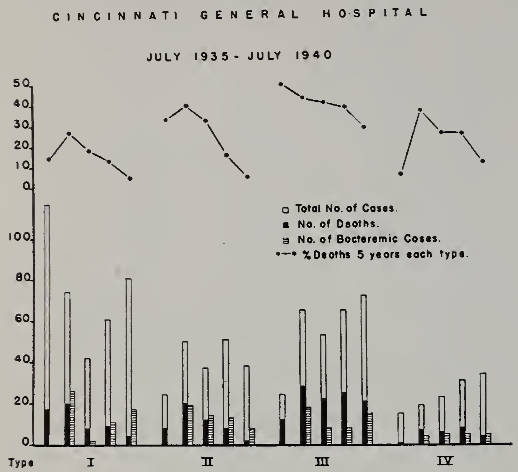

Plate 5. The group of shafts over each type represents the cases for five separate years. The first shaft of each group representing the first year has no leaning shaft of bacteremic cases. This was omitted, as blood cultures were not taken on all cases in 1935-6.

THE EFFECTS

The most dramatic effect after the administration of this drug was the critical drop in temperature which occurred usually within the first 18 hours of therapy. Unlike serum induced crisis this drop was rarely associated with marked clinical improvement. There was no apparent relation between the blood sulfapyridine level and the decrease in temperature. In several instances temperature fell when only a trace of the drug could be demonstrated in the blood. Sulfapyridine apparently cleared the blood stream of many of the patients who had bacteremia. Only one patient in this group developed empyema, which cleared without resort to surgical intervention.

Careful scrutiny of the results in this first test revealed that neither specific serum or sulfapyridine was entitled to an exclusive position in the therapy of pneumococcal disease of the lungs. Two of 45 patients (4.44 per cent) treated with specific anti-pneumococcus serum died. Six of 49 patients (12.04 per cent) receiving sulfapyridine died. During 1940 sulfapyridine and related drugs were given a more thorough trial, but selection of cases was not so well classified. Patients from all categories of pneumonia were treated, many of them old. In all, 131 patients were observed up to April 1, 1940.* The death rate in this group was 6.8 per cent. Of these 22½ per cent were bacteremic.

Sulfamethylthiazol: Because of the experimental status of this drug only those patients having typical pneumonias were treated. Fifty-one patients received the drug, ten of whom were bacteremic. Mortality 2 (4 per cent).

Sulfathiazol: This was also used as an experimental drug, and again only selected cases of typical pneumonias were treated. Twenty-seven pneumococcal pneumonias were treated with this drug without a fatality. Seven of these cases were bacteremic. Sulfathiazol has been found to be as effective as sulfapyridine without most of its inherent dangers. It is tolerated better by the gastro-intestinal tract and is followed by less cyanosis. Its effect on the kidneys would seem to be negligible. The same might be said of its destructive effect on the blood.

We have reason to believe that chemotherapy is the preferable method of treating the pneumonias, because of its wider range of usefulness, but neither this nor specific antipneumococcus serum is entitled to exclusive use. Apparent evidence is at hand to show that there were fatalities from the use of both forms of treatment. Where typing service is not available, and where blood cultures are not reliable, it would seem advisable to treat cases of pneumococcal pneumonia with one of the sulphonamides.* If a patient fails to improve in the first 24 hours, both forms of treatment should be administered. It must be emphasized that the sputum typing and blood culture of all cases must be continued. This is the only way to evaluate the efficacy of new therapeutic agents, as well as the only certain method of determining whether one or more

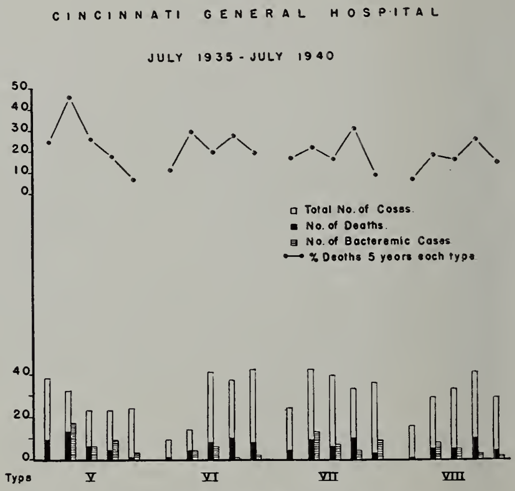

Plate 6. The group of shafts over each type represents the cases for five separate years. The first shaft of each group representing the first year has no leaning shaft of bacteremic cases. This was omitted, as blood cultures were not taken on all cases in 1935-6.

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*One third of these cases were included in the first study.

*In light of more recent results, sulfathyazol seems the drug of preference.

than one type of pneumococci is responsible for the disease. It is impossible to sufficiently stress the importance of careful blood culture studies in each instance. It is the most accurate criterion of the virulence of the disease, as well as the most reliable basis in gauging prognosis.

COMMENT ON CHEMOTHERAPY

A. The drugs are usually given by mouth which, of course, is the great advantage of this type of therapy. This may, however, prove to be a disadvantage where vomiting or malabsorption may defeat the intended purpose. Most of the drugs are so poorly soluble that subcutaneous administration or rectal clysis are not practicable. The sodium salt of these drugs, however, is highly soluble and permits of intravenous administration. There is some evidence that the toxic effects appear more frequently when the drug is given in this way.

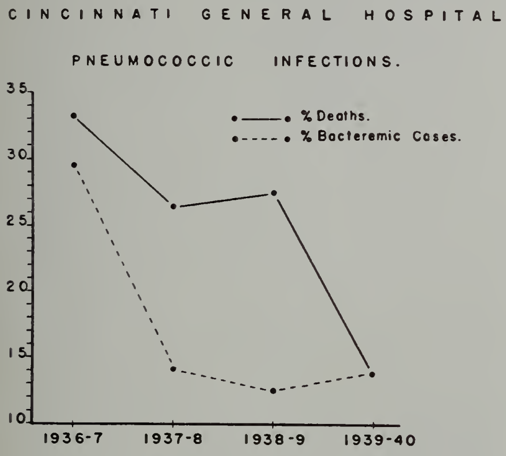

Plate 7. The sharp decline in % deaths for 1939-40 and the constancy in % bacteremic cases for 3 years suggests a better pneumonia control in 1939-40.

B. Dosage: Little is known of the accurate dosage of these drugs. It probably depends on body weight, but absolute precision is not an essential factor. As a rule six grams daily suffice for most adults. There is considerable variation in the speed in which patients secrete and excrete the drug. Some people inactivate by conjunction (or acetylation) a significant amount of the drug. Consequently at least one determination of the "free" drug level on such patients adds materially to the judicious management of the case.

Dangers: These consist almost exclusively in the gravity and extent of the toxic manifestations of the drug. Nausea and vomiting are most common in those patients treated with sulfapyridine. In this respect the thiazol derivatives seem distinctly superior since such reactions are less common. A large number of patients showed delirium or mental depression after treatment with sulfapyridine, and not a few cases showed marked hematuria, but no evidence of anuria. While similar reactions have been noted with thiazol, they are less frequent.

Complications: It is too early to say with any degree of assurance that complications are less frequently met, but our incidence of complications is certainly lower since all patients receive the benefit of some form of therapy, whether entering the hospital late or early in the course of the disease.

For the year 1940 a very considerable decline in the death rate is indicated for not only the General Hospital but the city at large. Moreover, this same experience has been reported from various centers where similar work has been in progress. This applies to many sections of inhabitants as is shown by the recent reports of the Metropolitan Life Insurance Co.

Metropolitan Life Insurance Co.
Death Rates per 100,000 Policyholders from Selected Causes
Pneumonia—all Forms

1939	75.2	Year to date end of February
1940	58.3	Year to date end of February
1939	76.1	Month of February
1940	63.9	Month of February

Thus, in an incredibly short time the inroads made by the penumonias are being halted. Whether or not occasional epidemics of so-called virus pneumonia or other refractory infections will cause us to change our opinion, it seems obvious that at least two quite reliable, specific agents are at hand to assist us in overcoming the ravages of one of mankind's worst enemies.

Plates 5, 6, 7 bear witness to the fact that probably all types of pneumonia are amenable to one or another of the drugs, to type specific sera or a combination of the two treatments. Time alone will tell whether the rarer types of pneumonia will always respond as favorably, but certainly infections causing the largest number of cases of pneumonia show evidence of yielding promptly to treatment, intelligently administered and especially early in the disease.

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Ligation of the Patent Ductus Arteriosus

PAUL W. GEBAUER, M.D. and A. D. NICHOL, M.D.

ON May 6, 1907, in a presentation before the Philadelphia Academy of Surgery, Munro[1] proposed ligation of the patent ductus arteriosus to prevent death from circulatory failure. He stated, "In the hope that it may be possible to detect such a lesion in time to allow surgical interference, I would urge those skilled in the diagnosis of infantile lesions to lend their aid". This hope, which may have been prophetically expressed, was recently fulfilled.

On March 16, 1937, Strieder[2] operated on a patient with subacute bacterial endocarditis. Complete closure could not be accomplished. After a remarkable uneventful course the patient died suddenly of acute gastric dilatation on the fourth postoperative day.

During August, 1938, Gross[3] performed the first successful ligation. In September, 1939, his excellent article[4] on the surgical management of this disorder with a report of four successful cases appeared. His work and that of Jones et al[5,6] discuss the etiology, pathological anatomy, clinical and laboratory findings, operative indications and operative technique. At the present time only a few cases have been recorded. Our purpose is to report our experiences with the following three patients.

CASE REPORTS

Case 1. B.D., white female, age 39, was first admitted to the out-patient department of St. Luke's Hospital on May 7, 1938, complaining of shortness of breath, heart consciousness and exhaustion after effort. At three years of age she had smallpox and pneumonia, but not until the age of five when she had whooping cough did anyone become especially interested in her heart. During childhood she voluntarily restricted her activity. She was married at 24. Pregnancies with full term deliveries of normal infants occurred at 26 and 32. These pregnancies were difficult and complicated by nausea and vomiting but no definite symptoms of myocardial insufficiency. Following the second, her physical activities had been further restricted. At the time of the initial examination emotional or physical strain caused a marked, rapid and regular heart consciousness, exhaustion, and shortness of breath. With these difficulties she carried out the less strenuous forms of her household duties.

The patient was a frail, nervous individual with pallid skin except for transient flushing of the face. The thyroid gland was firm and uniformly enlarged to approximately twice normal size. There was a slight digital tremor and the blood pressure was 146/76. The heart was obviously enlarged with increased precordial activity, especially in the third and fourth left interspaces. There was a fine systolic thrill palpable over an area corresponding to the visible basal pulsation and to the maximum intensity of a loud "train-in-the-tunnel" murmur. The heart rhythm was regular and the rate 100. The electrocardiogram was essentially normal with a small S I and Q III. The blood Wassermann was negative as was the urinalysis. The basal metabolic rate was plus 7 and plus 14. Red blood cells 4,760,000 and hemoglobin 14 gms.(S). The diagnosis was patent ductus arteriosus and goiter without thyrotoxicosis.

During an eighteen month study she was given Lugol's solution on several occasions without demonstrable specific effect. Tachycardia and heart consciousness were usually present, she remained nervous and there was a variation in body weight from 94 to 99 pounds. The impression was that her physical state was one of gradual deterioration. She was admitted to the hospital on January 12, 1940, because of her increasing discomfort. At complete rest the physical examination was not changed from that described above. The blood pressure was 160/80. Heart rate 84. Height 63½ inches. The maximum vital capacity was 2400 cc. X-ray findings shown in Fig. 1. The venous pressure was one centimeter of water above the ziphoid level. After two weeks' rest in bed the patient was less nervous and there was a mild decline in the pulse curve. It seemed obvious that her condition probably would have been tolerable with a continued existence in a carefree and irresponsible environment. Because of her previous experiences she accepted operation.

In this instance the risk was regarded as maximum because the history was that of a diminishing cardiac reserve, the precordial activity was marked. the patient was 39 years old, and the X-ray (Fig. 1) showed a huge pulmonary artery as well as calcification in the region of the ductus, and marked increased vascularity in the

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Submitted October 1, 1940.

lung fields. In addition there was a marked diminution in the vital capacity.

Operation on January 24, 1940. Exposure and dissection were well tolerated under cyclopropane anesthesia with mild positive pressure. The ductus was visible beneath the mediastinal pleura just anterior to the vagus nerve and opposite the origin of the left subclavian artery from the aortic arch. It appeared to be an integral part of the pulmonary artery. Its lateral aspect measured 8 mm. in length. It was 12 mm. in diameter. The pulmonary artery was huge, tense and thinned almost to the point of transparency. Its diameter was more than twice that of the aorta. A marked thrill, of maximum intensity in the pulmonary artery at the duct orifice, and of minimum intensity in the aorta, was palpable in all surrounding structures. The cardiac pulsations were bounding and forceful. Closure of the ductus by digital pressure caused a slowing of the heart rate within four beats, a rise in the blood pressure with a lessened pulse pressure, disappearance of the thrill, and a dramatic relaxation of the pulmonary artery.

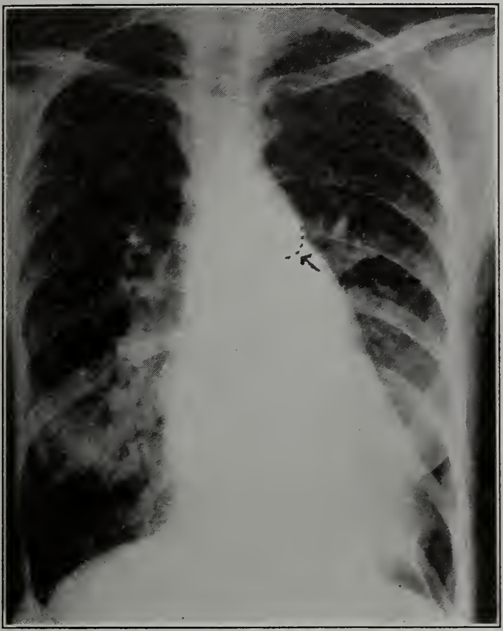

Fig. 1. Case 1. Chest roentgenogram shows enlarged heart, diffuse bulge in the region of the pulmonary artery below the aortic knob. The hilus shadows are enlarged and the vascular markings in the lung fields are prominent because of the dilated pulmonary vascular tree. Arrow points to small thin plaque of calcium in the aorta near the expected location of the patent ductus.

The ductus was dissected until only a small area posteriorly, between it and the left main bronchus, prevented the passage of a ligature. In all cases the tissue in this region has been quite dense and difficult to dissect. This is the site of origin of the pericardium. The left main bronchus could be palpated; it was elongated and narrowed by encroachment of the huge pulmonary artery. Posteriorly the ductus had no appreciable length and the aorta was palpably hardened. In attempting to complete circumferential dissection separation of the aorta and the pulmonary artery occurred with tremendous hemorrhage which was controlled with the finger. Blood was administered through an intravenous canulla which had been inserted previously, the exposure was enlarged; it was necessary to clamp the left pulmonary artery and duct to fully control the bleeding. This procedure was overburdening in the presence of massive hemorrhage and cardiac dilatation, auricular and finally ventricular fibrillation occurred in spite of all measures of prevention.

Post mortem examination revealed tremendous dilatation of the entire pulmonary arterial tree which was most marked in the right main branch and which, in the absence of clinical and post mortem evidences of congestive failure, was regarded as the major factor contributing to the marked reduction in vital capacity. The heart was hypertrophied (400 gms.) There was moderate sclerosis of the pulmonary artery and aorta. The orifice of the ductus on the aortic side was completely encircled by a ring of calcification. The ductus posteriorly was simply a fistula between two great vessels, and its anterolateral aspect had no appreciable length. The site of hemorrhage was a small tear in the axis of the vessels posteriorly. It appeared to be a separation of the pulmonary artery from the aorta. There was moderate compression and elongation of the left main bronchus. The thyroid gland was normal except for an increased amount of colloid.

Comment. This is the oldest patient to be operated at the time of writing. Reasoning on the premise that the constant presence of aortic pressure within the pulmonary artery leads to gradual and progressive dilatation with

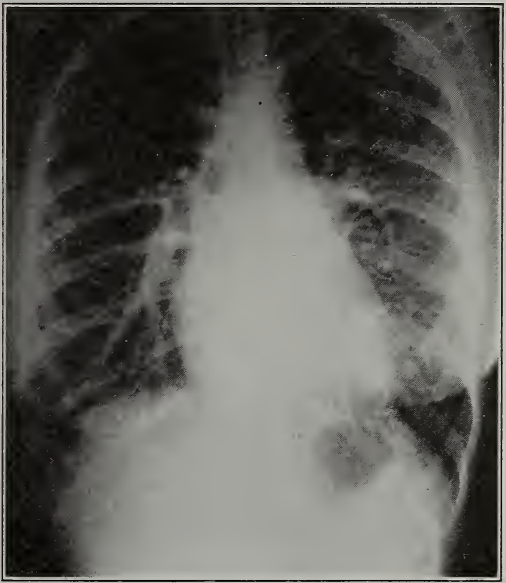

Fig. 2-A. Case 2. Roentgenogram before operation with 70 per cent diodrast in the pulmonary arterial tree. Large vessels can be seen within the lungs. The large pulmonary artery can be seen forming the bulge in the left border of the mediastinal silhouette. The ductus itself is not visualized. The cardiac shadow is large. After operation the change in heart size was not notable, however, the pulmonary bulge had disappeared.

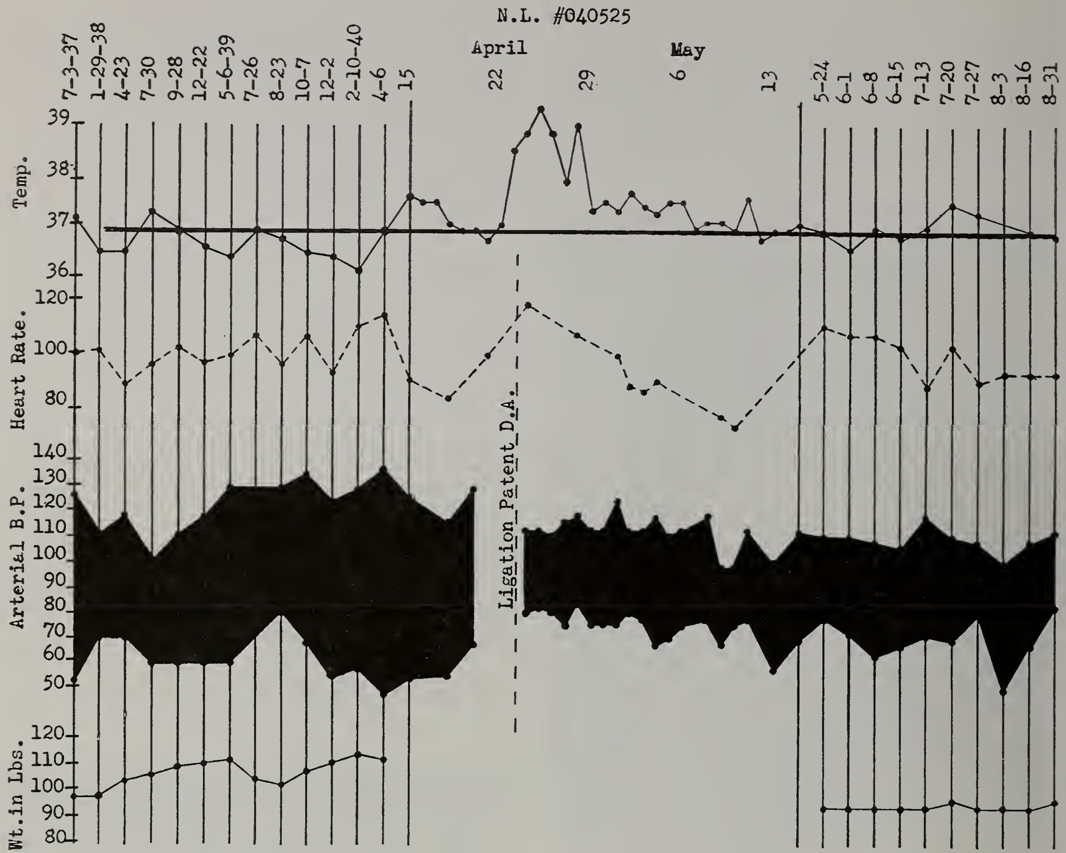

Fig. 2-B. The curves cover a period of 32 months preoperative, the operative period and three months of the postoperative period. From above down they depict the following: temperature, heart rate, blood pressure and weight. A moderate operative reaction is noted. Ever since ligation there has been a decreased pulse pressure mainly due to a diastolic rise which has gradually come to a slightly lower level.

thinning of the wall, we believe it reasonable to assume that the longer a patent ductus has been present the more difficult it will be to effect closure. As the fingers of a rubber glove shorten and become wider when the whole glove is inflated the length of the ductus diminishes as the pulmonary artery dilates. In the same process it widens and its original location deep in the mediastinum shifts anterolaterally. This shift in position and size carries the ductus to the border of the mediastinum and brings it closer to the anterior chest wall, thereby making physical signs more pronounced and accessible. The length of the ductus is not the same in all parts of its circumference; it may appear to have an appreciable length laterally, but medially and posteriorly it may have none. Undoubtedly in this instance dissection should have been discontinued, for if a ligature had been passed successfully, it is possible, in view of the rigid ring of calcium on the aortic side, that with tightening the ligature would have cut through the ductus. The preoperative X-ray (Figure 1) revealed the area of calcification. Weiss[7] has assigned a distinct diagnostic value to such findings. In the future if such change is present in the region of the ductus it may prove to be a contraindication to ligation. In all probability if this patient had been operated years previously, before she began to experience real cardiac disability, and before the changes depicted above had reached such an advanced state, the operation might have been a successful and gratifying procedure as it was in the following two cases:

Case 2. White female, age 14, was referred to the out-patient department of St. Luke's Hospital on July 3, 1937, with a provisional diagnosis of patent ductus arteriosus. When she was two years old a physician had told her family that the child had "heart trouble". The history further revealed a questionable transient cyanosis and presumable slight but definite abnormal exhaustion and heart consciousness following physical effort. The symptoms were apparently of a minor degree and were compatible with a relatively normal existence. The child's nutrition was fair. She was 60½ inches in height and weighed 98 pounds. There was increased precordial activity. The heart size was normal to percussion but a moderately pronounced systolic and diastolic thrill was palpable just to the left of the sternum in the first and second intercostal spaces. There was a loud continuous murmur with systolic accentuation heard over a roughly triangular area in the same region and the greatest intensity of this murmur corresponded to the small area in which the thrill was palpable. A faint double murmur was heard at the apex and in the right and left interscapular spaces. The second pulmonic heart sound was markedly accentuated. The electrocardiogram showed a deep S I and small R I. X-ray of the chest revealed a marked prominence in the pulmonic area and a definite enlargement of the pulmonary vascular shadows (Figure 2 A). The blood pressure was 126/52 and the heart rate 100 with the patient at ease.

For the following 30 months of observation it seemed that the patient's ability to tolerate exercise decreased. During this interval we had the unfortunate operative mortality of the preceding case and the unpleasant experience of watching a young patient die from bacterial endocarditis complicating a patent ductus arteriosus. The family was therefore advised that the patient should be submitted to surgical exploration. She was admitted to the hospital on April 15, 1940. Examination was much the same. Her height was 64½ inches and she weighed 108 pounds. The vital capacity was 3200 cc. The venous pressure was 1.0 cm. of water. The electrocardiogram showed a small but definite S I and the P-R interval was about 0.20 sec. Red blood cells 4,620,000: hemoglobin 11.4 grams (S) and the white blood cells 11,300. The other laboratory findings were normal.

At operation on April 23, 1940, the ductus in contradistinction to the previous case was visible only after finger retraction of the pulmonary artery from the aorta. The pulmonary artery was half again the size of the aorta. The heart was enlarged. The thrill had the same characteristics as in the previous case but was less intense, and the pulmonary artery was not so thin. The duct was carefully dissected free; the following are estimates of its size: length posteriorly and medially—4 mm., laterally and anteriorly—11 mm., diameter—10-11 mm. Temporary closure caused a slowing of the heart rate, relaxation of the pulmonary artery, disappearance of the thrill, and a rise in blood pressure which was preponderantly diastolic. The ductus was obliterated with a single ligature of braided #9 silk.

The postoperative course (Figure 2 B) was uneventful. For the first few days the pulse averaged 130 to 140 and the temperature 38.5° C. The diastolic pressure remained well elevated. Precordial activity was more than preoperatively. This gradually subsided as the pulse and temperature became normal. On two occasions serosanguinous fluid was aspirated from the left pleural space. It was sterile. The thrill had disappeared. No murmur was detected until a few days after operation when a barely audible systolic and diastolic murmur was heard. This murmur in the next few days gradually increased in intensity until it simulated the preoperative murmur. The diastolic pressure remained elevated and no thrill could be palpated. The murmur since has gradually decreased in intensity and duration. For the past month it is barely audible and the diastolic element is questionable. X-ray shows the pulmonary artery bulge to be gone and the vascular shadows are less prominent. The patient now has a normal tolerance to exercise.

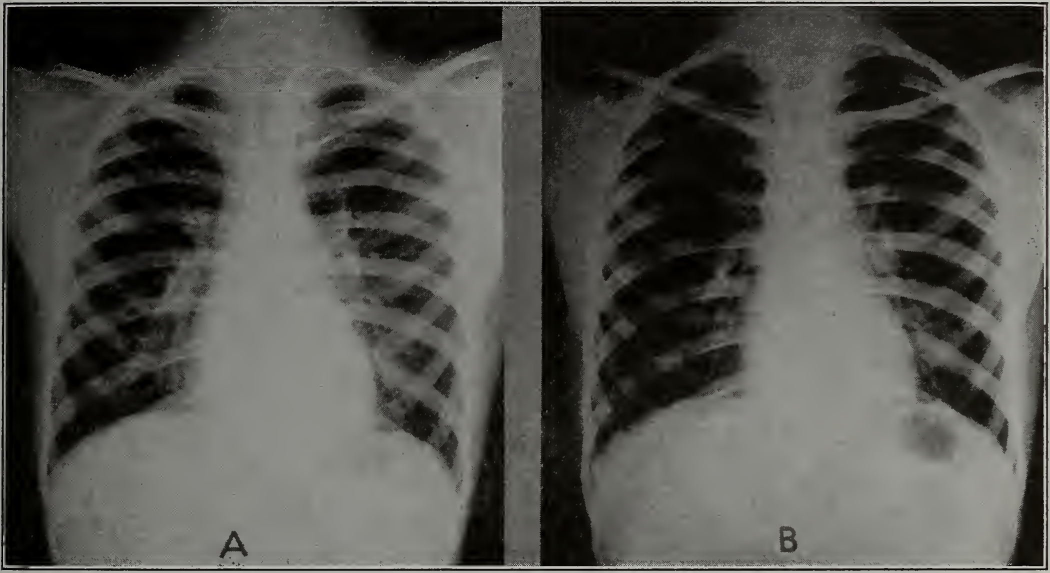

Fig. 3. Case 3A. Chest roentgenogram before operation. B. After operation. The same changes are present as in Case 2.

Comment. This rather large ductus was not located deep in the mediastinum and dilatation of the pulmonary artery was well under way. The slowing of the pulse and the decrease in cardiac activity accompanied by a rise in the diastolic blood pressure, as noted at operation immediately subsequent to ligation, is dramatic, but is followed in the early postoperative period by strenuous cardiac activity with a rapid pulse. This change causes a heaving of the precordium,[6] and must be kept in mind when operation is contemplated. In this instance it subsided rather rapidly after the early postoperative days. We do not know whether it follows a disturbance of the nerve tissue in the region of the dissection, the altered dynamics of the circulation, or secondary changes in the pulmonary vascular bed. At the present time we are inclined to believe that this postoperative reaction tends to parallel the degree of abnormality produced by the patency. It was practically absent in the following patient.

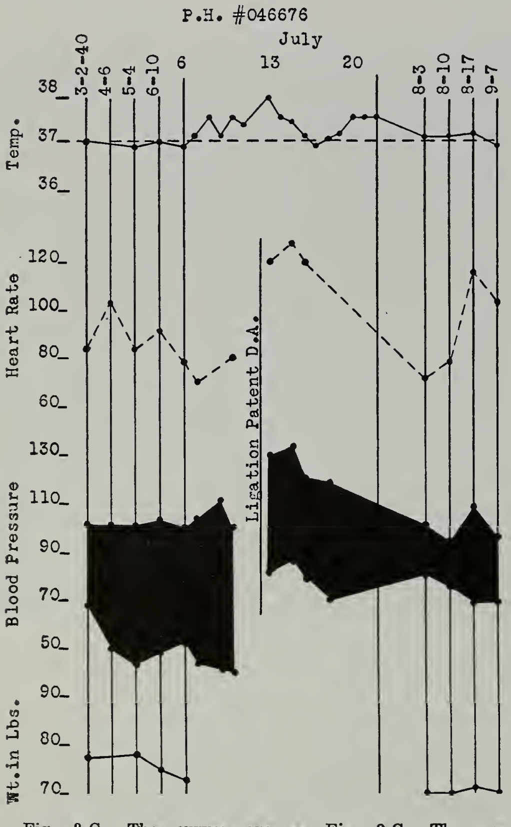

Fig. 3-C. The curves are as Fig. 2-C. The preoperative period is three months, the postoperative two months. The mildness of the operative reaction is evident. The blood pressure rise with a diminished pulse pressure is well shown.

Case 3. P. H., white female, age 11, was referred to the out-patient department of St. Luke's Hospital from the Cleveland Fresh Air Camp by Dr. Warren A. Fargo with a diagnosis of patent ductus arteriosus. She had been recommended to that institution because of a failure to gain weight and abnormal fatigueability. Her family had been told when the child was five years of age that she had leakage of the heart. An attempt had been made to restrict her activities while at school but at other hours of the day she had led a normal life enjoying vigorous physical sports without any successful parental restriction. It seemed definite that she became more short of breath than her playmates, and observations by others corroborated her statements of a transient, unusual forceful heart action.

At examination on March 2, 1940, her weight was 77½ pounds and her height 58 inches. Positive physical findings were confined to the heart which was not enlarged to percussion. The heart sounds were normal except for an area in the first, second and third interspaces extending from the left edge of the sternum about 4 cm. laterally. A double murmur of moderate intensity with slight systolic accentuation was audible in this region. The second pulmonic sound was normal. The cardiac rhythm was regular and the rate 84. The blood pressure was 102 systolic and 66 diastolic. The electrocardiogram was normal. Red blood cells 4,720,000; hemoglobin 13.2 gms. (S) and white blood cells 11,600. X-ray of the chest (Figure 3-A) showed a prominence in the region of the pulmonary artery and debatable accentuation of the pulmonary vascular shadows.

There was little variation in the abnormal physical findings during the next four months although on occasions the murmur was distributed over a wider area and referred down the left border of the sternum. A slight systolic pulsation was visible in the second left interspace and a fine systolic thrill was palpable in this region. There was a marked fall in diastolic pressure following severe exercise. She was admitted to the hospital on July 6, 1940.

At operation six days later the findings on opening the thorax were normal except that the pulmonary artery was unusually tense, the heart overactive and questionably enlarged. There was a fine distinct thrill within the pulmonary artery which reached the point of maximum intensity rather deep in the mediastinum. Unlike the other cases the ductus had to be located by palpation of the thrill and dissection. This was done through an incision in the mediastinal pleura between the vagus and the phrenic nerves. The recurrent laryngeal nerve was then isolated and the ductus dissected free. Surprisingly it was approximately the size of the left subclavian artery. It measured 4 mm. in the shortest length, 11 mm. on the larger lateral aspect, and 6 mm. in diameter. It was doubly ligated with #8 braided silk after temporary closure obtained the same changes as noted in the other cases.

The postoperative course (Figure 3-C) was most mild. There was no pronounced cardiac activity. The diastolic pressure remained elevated. The patient sat up on the first day. Fifty cubic centimeters of serosanguinous fluid was removed from the pleural space. An X-ray on the tenth day showed an apparently normal chest. Since operation there have been no abnormal findings by examination or X-ray. Within two months after operation the patient has realized that she tolerates exercise better than at any time previously.

Comment. This patient's postoperative course was much milder than that of Case 2. The patent ductus was smaller and no great changes had yet taken place. There has been a change in the size of the heart and the appearance of the lung fields by X-ray (Figure 3-C) since operation. We feel that if the operation had been delayed for a number of years, until adult life, or until embarassing symptoms occurred, that the operative risk would have been much greater.

DISCUSSION

Our experiences with three cases of patent ductus arteriosus between 11 and 39 years of age are presented. From these patients and from a study of the literature we are led to the following tentative conclusions.

We believe operation should be performed early because children withstand thoracic surgical procedures so much better than adults, because the operation is technically easier, and because the shorter the duration of patency the less the degree of pulmonary dilatation, cardiac enlargement, vessel sclerosis, and the less severe the postoperative reaction. Early intervention should be preceded by a period of observation during which diagnostic studies are made, and which is long enough to preclude the rarity of spontaneous closure. We conclude this after comparing the available evidences that spontaneous closure occurs in the face of unquestionable patency with the advantages which accompany operation when it precedes advanced pathological changes.

Such patients are often urged to lead an inactive life during childhood, may be forced to inactivity by a diminished cardiac reserve in early adulthood, and throughout life are distinctly more susceptible to bacterial endocarditis, aneurysm and rupture of the ductus, or thrombos formation as well as rapid or slow cardiac failure. In some instances, middle life may be reached comfortably. We suspect that such occurrences are rather rare inasmuch as Abbott[8] found the mean age of 92 patients to be 24 years at the time of death. On the other hand we feel that the risk of operation is much greater in adults near the limit of their cardiac reserve. The operation may be most difficult because of sclerosis, or because the ductus finally becomes nothing but adjacent holes in the walls of two large vessels. Exploration should be undertaken most cautiously in later life and in some instances it should be abandoned rather than attempt to dissect around something which has ceased to exist.

It is obvious that the few cases briefly reported in the literature and our limited experiences offer insufficient material for authoritative or absolute conclusions. The opinions set forth herein evolve from the information at hand. Time and more study alone will prove, disprove or alter them.

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Diagnosis of the Irritable Colon

The diagnosis of irritable colon is made only as a last resort. The etiology, absence of pathological condition and the functional disturbance may be obvious at first glance, but failure to look carefully for organic disease will allow some curable cancers or removable gall stones to be overlooked.

The symptoms of the irritable bowel come from spasm and distention. The irritants mentioned previously are not the sole cause of these disturbances in function. A cancer in the alimentary tract is an irritant. I recall in this connection a 45-year-old man, obviously nervous, who had had recent difficulty with his business and with his wife. He had had bloating and belching after meals and constipation and no other symptoms. Investigation was undertaken only to prove to him he had no organic disease. The roentgenographic studies showed a large medullary carcinoma of the stomach. Most physicians can recall instances of gall stones in normally functioning gallbladders, causing no colic but associated with much vague abdominal distress and some constipation. The symptoms are from the bowel, not the gallbladder, but enough irritation is caused by the gall stone to preclude complete relief of symptoms without surgery. Complete investigations should be carried out whenever possible.

Individuals with irritable bowel are generally pessimists and are frequently apprehensive concerning themselves. They go from practitioner to practitioner until someone examines them in a satisfactory manner. The disease is prone to recurrence and unless the physician is able to say without reservation that the disease is functional, doubt will exist in the patient's mind. When doubt is present, therapy is generally ineffectual.

Each case is an individual problem but it is necessary to attempt to generalize. Nearly all patients should have complete physical examinations, gastrointestinal roentgenograms (including stomach, gallbladder and barium enema), proctoscopic examination, gastric analysis and stool examination. Certain selected cases can be handled adequately with a less formidable array of diagnostic procedures. These will of necessity require much more painstaking work and analysis from a clinical standpoint.—John M. Rumsey, M.D., Kansas City, Mo., Jour. Mo. S.M.A., Vol. 38, No. 5, May, 1941.

Hydatidiform Mole With Report of a Case

ANTHONY PIRAINO, M.D.

ANY portion of the ovum—chorion, amnion, placenta, or fetus—may be the seat of disease, or may present abnormalities. Hydatidiform mole is a disease of the chorion, characterized by dropsical degeneration of the villi, giving the structure the appearance of a bunch of white grapes. In this condition we find that the terminal extremities of the chorionic villi are converted into transparent vesicles with clear, viscid contents. These vary in size from minute bodies to cystic structures the size of a small plum, and hang in clusters from the villous stems to which they are connected by thin pedicles.

Positive statements cannot as yet be made concerning the etiology of hydatidiform mole. It is reasonable to believe the process is inherent in the developing ovum, for in cases of multiple pregnancy, one ovum may develop normally, while the other undergoes hydatidiform changes.

Hydatidiform mole is a relatively rare disease, occurring, according to one authority, once in 20,000 pregnancies; whereas, another states it to occur once in 3000 cases.

The process usually comes on early in pregnancy, rarely making its appearance after the third month. As the chorionic villi are nourished by the maternal blood, the mole may continue to grow after the death of the embryo, and may attain considerable proportions, though spontaneous expulsion is rarely delayed after the sixth month.

The urine and serum of patients having moles will give a positive Ascheim-Zondek pregnancy test. The amount of anterior pituitary hormone excreted in these cases is many times that excreted during normal pregnancy. One may assume that the proliferating trophoblastic cells stimulate the anterior pituitary to excess secretion. The excess of anterior pituitary sex hormone has reached a normal level in from eight days to two weeks, after termination of normal pregnancy, but it persists even as long as two months after the expulsion of a hydatidiform mole.

CASE REPORT

The patient, a 54 year old white married female, came to my office on August 21, 1940, with chief complaint of vaginal bleeding of six weeks duration. She had noticed an increase in size of her lower abdomen and had also experienced a feeling of heaviness in her pelvis. Patient stated that she stopped menstruation entirely about 15 months previous and did not menstruate until six months later. At that time she resumed her normal periods until time of vaginal bleeding six weeks before coming to my office. Past history revealed good state of general health. Onset of menstruation was at 13 years of age. Duration of periods was four to five days with intervals of four weeks. Patient has had 12 pregnancies. Eight children are now living and four died shortly after birth with causes unknown.

Physical examination revealed a short, obese, restless, white female in no apparent pain. Notable finding was a mass about size of a large honey-dew melon; mass was located in lower mid-abdomen and was movable, slightly tender, smooth, and somewhat soft. Pelvic examination showed a moderate cystocele and rectocele. The cervix was gritty, scarred, and not elongated. External os barely admitted tip of examining finger. Mass in lower abdomen was evidently an enlarged uterus, since it was found to be continuous with the cervix.

Obviously, the patient had a uterine tumor. The question as to the type of tumor was a bit more difficult. However, the consistency of the mass led me to suspect the possibility of an hydatidiform mole and on the strength of this I had an Ascheim-Zondek test done on the patient's urine. The test was returned positive.

Patient was hospitalized on August 23, 1940. Laboratory studies showed a red blood count of 4,150,000, hemoglobin of 85 per cent, white blood count of 7800, and the differential count was within normal limits. Although not conclusive with findings to this point, I still favored the diagnosis of hydatidiform mole. Patient refused to remain in the hospital for further study and so she was discharged on August 25, 1940.

On August 31, 1940, I was called to the patient's home because she was having severe vaginal bleeding and she had passed a mass from the vagina during this bleeding. On examining this mass I thought it to be characteristic of hydatidiform mole. The specimen was sent to the pathology laboratory and diagnosis of hydatidiform mole was made with no evidence of chorioepithelioma. In a few days patient ceased having vaginal bleeding and within a week she was able to be up and about. Since she felt quite well again, she refused to have any operative procedure done. Thus the patient has been followed by having repeated Friedman tests done. The tests were all positive. The last one, performed on November 15, 1940, two and one-half months

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Submitted November 26, 1940.

after expulsion of the mole, was found to be positive.

There have been some differences of opinion in regard to the treatment of this condition. However, I believe that the following established facts should be the basis of our treatment in these cases: (1) some moles exhibit invasive characteristics in penetrating the uterine wall, (2) a certain percentage of moles form the malignant chorio-epithelioma, and (3) even with this very general knowledge concerning hydatidiform moles it is extremely difficult to predict the outcome from the histological picture. Therefore, I believe that if the patient is still in the childbearing period, and if definite diagnosis has been made either by expulsion of the mole or by curettage, then she should be carefully followed by doing repeated Friedman tests to determine whether or not they are persistently positive or become negative. If the tests remain positive for longer than two or three months, then a complete hysterectomy and bilateral salpingo-oophorectomy is indicated. If the tests become negative and there is no evidence of growth or bleeding from the uterus, then there is no indication for hysterectomy; although the latter group of patients should have Friedman tests done at regular intervals during the next year.

However, if the patient is at the end of her child-bearing period, I believe it is best to do a complete hysterectomy and bilateral salpingo-oophorectomy as soon as a definite diagnosis of hydatidiform mole has been made. In any case, I do not believe that any attempt should ever be made to empty the uterus from below. This is not only a hazardous procedure, but it also does not assure us of eradication of the condition.

The diagnosis of hydatidiform mole is often difficult. It is usually only diagnosed after expulsion of the mole or by examination of uterine curettings. Thus it is always well to bear in mind the following points: (1) as Williams states, hydatidiform mole should always be suspected when hemorrhage occurs in a patient over 30 years of age whose uterus is considerably larger than it should be for the supposed duration of pregnancy, (2) that if a patient continues to bleed following an abortion, and especially if a curettage has failed to stop the hemorrhage, then Friedman tests should be done to determine the presence of anterior pituitary hormone in the urine, and (3), I believe that any patient with a uterine tumor should have a Friedman test done. If these three points are kept in mind, we shall diagnose more cases of hydatidiform mole and thus give the patients the greatest benefit possible; and the latter endeavor is by all means our best reward towards this effort.

9 South Main St.

Amebiasis With Pleuropulmonary Complications

Amebiasis is not a rare disease. Liver abscess is the complication most frequently encountered. Diarrhoea is often absent and amebae are not always found in the stools despite diligent search. Thirteen per cent of all cases of amebic liver abscess develop pleuropulmonary complications.

Amebiasis must be considered in the differential diagnosis of a lung abscess located in the right lower lobe. Diagnostic studies should include the induction of a pneumoperitoneum to determine whether or not the liver is adherent to the diaphragm. A dramatic prompt response followed specific treatment with emetine and stovarsol in the first case. Repeated relapses occurred in the second case despite adequate therapy and an unusually large liver abscess was discovered at autopsy.

Pulmonary tuberculosis was the initial diagnosis in each case but was ruled out in subsequent studies despite the chance finding of tubercle bacilli. Pulmonary disease secondary to amebiasis occurs usually by extension through the diaphragm. Amebic bronchitis without abscess may be present and emphasizes the fact, quoted by Keeton and Hood, that amebiasis is not merely a local intestinal disease but a general infection.—George A. Sherman, M.D., and Herbert Weinberger, M.D., Pontiac; Jour. Mich. S. M. S., April, 1941.

Diet in Pregnancy

The pregnant woman has need, in most instances, of modifying her diet when she arrives in this physiologic state. Likewise, it is equally necessary that the diet be watched carefully during the period of lactation. The caloric intake must be increased, adequate protein and minerals must be taken by mouth and particular attention should be paid to vitamins. The increased demands of the fetus plus the increase in basal metabolic rate indicates need of a greater number of calories than for the normal individual. When nursing, the production of the milk which is fed to the baby is responsible for the loss of 700 calories for each 1,000 c.c. of milk. Mineral requirements are increased during pregnancy. Calcium, phosphorus, iron, iodine and other minerals must be supplied the fetus. Many diets are adequate under normal circumstances. During the period of the puerperium the diet is not sufficient and it should be supplemented by a plentiful intake of foods containing these particular minerals. The same generalization applies to vitamins.—J. H. Musser, M.D., and W. A. Sodeman, M.D., New Orleans; Jour. Mich. S.M.S., April, 1941.

Usefulness of Gonadotropic Substances in the Treatment of Sterility of Endocrine Origin

JOHN C. BURCH, M.D. AND ORVILLE WRIGHT, M.D.

STERILITY of endocrine origin may result from disease involving any endocrine gland. In the individual case, therefore, it is imperative that the offending gland be identified and appropriately treated. In certain situations, gonadotropic hormones will be indicated. If these substances are used, it will be in the hope of achieving one or more of the following objectives:

1. The production of eggs capable of fertilization.
2. The production of ovulation.
3. The stimulation of conditions in the genital tract favorable for pregnancy.

The purpose of this discussion is to evaluate the chances of attaining these objectives by means of gonadotropic hormone therapy. There are three different types of gonadotropic preparations. They are:

1. The pituitary gonadotropes.
2. The gonadotrope excreted in the urine of pregnant women.
3. The gonadotropic substances which occurs in the serum of pregnant mares.

THE PITUITARY GONADOTROPES

Soon after the discovery of the gonadotropic action of the pituitary by Smith and Engle,[1] and Zondek and Aschheim,[2] the attention of investigators was attracted to the possibility of two gonadotropic hormones, and it was not long until Hisaw and his associates[3] succeeded in obtaining follicle stimulating (FSH) and luteinizing fractions (LH) from pituitary extract. Whether the gonadotropic complex of the anterior lobe actually consists of two distinct hormones is still an open question but, whatever the answer, the fact remains that two principles with characteristic pharmacologic actions can be extracted. Hence, from a therapeutic standpoint, they must be considered as separate.

The outstanding characteristic of the pituitary gonadotropic fractions is their mutually complementary action, termed augmentation. FSH increases the total number of follicles in the rat ovary, whereas LH increases the percentage of antra-containing follicles.[4] Either fraction will cause ovulation, but the amount of pure LH required is 500 times the amount necessary when this fraction is given in combination with FSH.[5] Ovulation appears to depend, therefore, upon a proper combination of the two principles.

From a consideration of the action of the pituitary factors in the different species of experimental animals, the possibilities for their use in the treatment of sterility are obvious. However, we are woefully lacking in information concerning their effects upon the human ovary, because of the scarcity of reliable extracts. At present no potent refined preparations are available commercially. Recently the potencies of five of the best known commercial preparations were examined by Goldman and Cinberg,[6] who found that only one of these contained as much as 10 per cent of its labelled strength. The decrease in potency was attributed to deterioration. For the present, therefore, we are necessarily compelled to omit the pituitary gonadotropes from the list of preparations suitable for the treatment of sterility resulting from endocrine disease.

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THE GONADOTROPE EXCRETED IN THE URINE OF PREGNANT WOMEN (CHORIONIC GONADOTROPIN) (APL)

At the time of its discovery in 1927,[7] this substance was thought to be of hypophyseal origin. However, the results of subsequent work on hypophysectomized animals[8,9] indicated that it was a different substance. It is now considered to be of placental origin. Its properties are similar to those of the so-called luteinizing fraction of pituitary extract. Its effect on the human ovary has been studied extensively, the early work of Geist[10] and that of Hamblen and his collaborators[11] being especially noteworthy. Hamblen[12] has recently summarized the observations reported in the literature. There is no evidence that APL ever stimulates follicular growth in

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Submitted December 9, 1941.

mature women. As a matter of fact, it causes degenerative changes in the follicles. It is of no use, therefore, for the production of fertilizable eggs. Under exceptional circumstances, this gonadotrope may produce multiple ovulations in women who are ovulating naturally. However, there is no evidence that it is ever capable of causing ovulation in the non- ovulating woman, hence it is not suitable for use in the treatment of sterility when the production of ovulation is the objective. Apparently it does stimulate the function of the corpus luteum, since it is said to increase the excretion of sodium pregnandiol glucuronide, which is a metabolic product of progesterone.[13] It may be useful, therefore, for promoting conditions favorable for pregnancy in the genital tract, and its use might make possible the implantation of fertilized ova which would otherwise be aborted. If the preparation is used for this purpose, it should be given after ovulation and in doses of 750 to 1,000 units per week. It should be borne in mind that this indication for the use of the preparation is purely theoretical and is not supported by any clinical evidence.

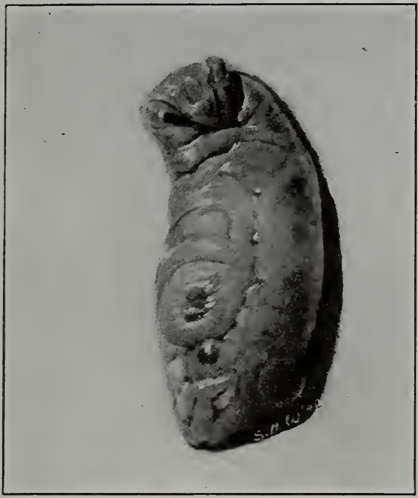

Fig. 1. Case No. 110194. Photograph of a drawing of a portion of a resected left ovary. The patient is a 39-year-old nulligravida, given 60 units of P.M.S. (Gonadogen)* intramuscularly 60 hours prior to laparotomy and 60 units P.M.S. intravenously 42 hours prior to laparotomy. Specimen shows one ruptured follicle and three unruptured hemorrhagic follicles.

THE GONADOTROPE FROM PREGNANT MARE SERUM (PMS)

The important observation that the serum of the pregnant mare contains a gonadotropic substance was made by Cole and Hart in 1930.[14] This substance produces marked follicle stimulation followed by luteinization in the hypophysectomized rat. There is some evidence that it is a complete gonadotrope, as it has been fractionated into extracts which are identical biologically with FSH and LH.[15] Very encouraging clinical observations on the effects of this gonadotrope have been reported. The most striking of these is the report of Davis and Koff.[16] These investigators were able to induce ovulation at any time during the cycle. Multiple ovulations were noted in a number of cases. The occurrence of the latter and the production of ovulation at times when this event does not ordinarily occur is sufficient evidence of the activity of the preparation.

The observations of Davis and Koff[16] have been confirmed by Siegler[17] and others. However, negative findings have also been encountered. Frank and collaborators[18] report failure in all of seven cases in which the preparation was tried. Davis and Koff[16] themselves failed to obtain positive results in all cases; they mention specifically three cases of endometrial hyperplasia in which ovulation could not be induced. Referring to cases in which positive results were obtained, Hartman[19] expresses the crux of the matter, as follows: "It is not clear in these cases whether an impending ovulation was precipitated or whether ovulation was actually caused by the treatment in an ovary otherwise incapable of ovulating." In our experience with the mare serum gonadotrope, we have been able at times to produce ovulation in the normal ovary by the

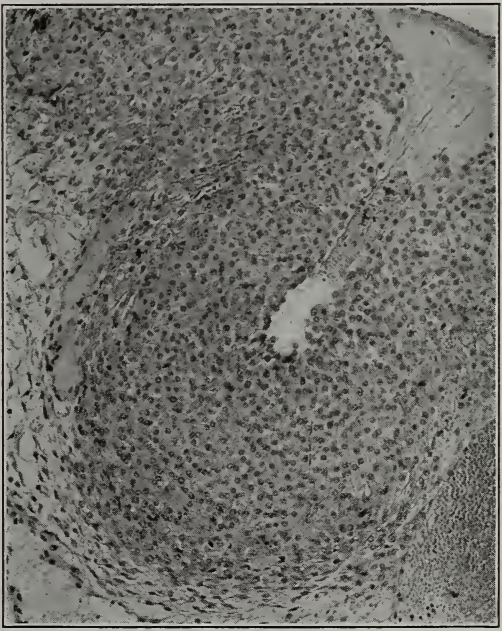

Fig. II. Same case. Section through rupture point showing early corpus luteum.

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*The Gonadogen was furnished through the courtesy of the Upjohn Company.

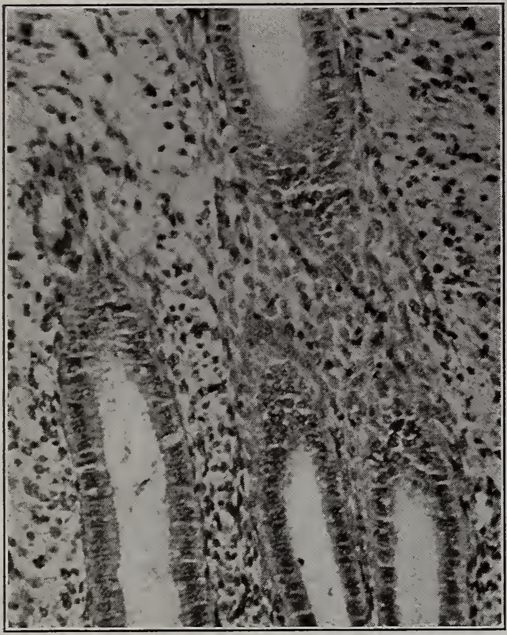

Fig. III. Same case. Endometrial biopsy taken on seventh day of cycle prior to administration of P.M.S.

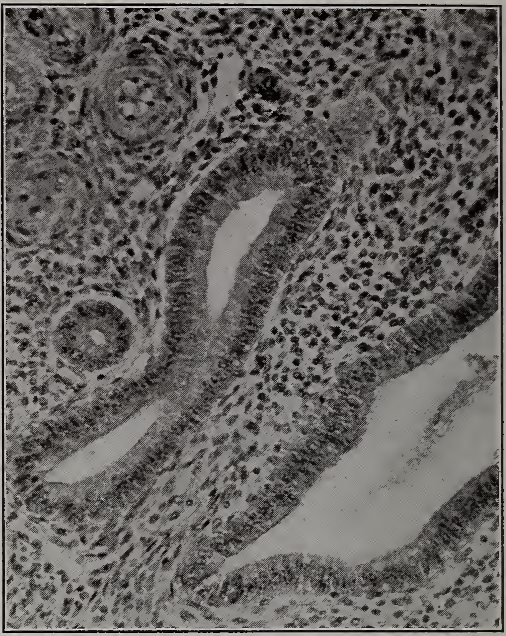

Fig. IV. Same case. Endometrium approximately 60 hours following initial dose of P.M.S.

administration of a single intravenous dose. On the other hand, we have not been able to produce ovulation in women with glandular cystic hyperplasia. This is a general finding and it suggests that some preliminary development of the follicle is essential for the ovulatory response to PMS. Whether PMS is capable of bringing about this preliminary development of the follicle in the human is still unproved. However, the substance undoubtedly has some follicle stimulating action and, since it is the only follicle stimulator now available, it should be tried when this action is desired.

Several clinical reports other than those just referred to indicate what can be done with the preparation. Huber and Davis[20] report the occurrence of pregnancy following administration of the substance to three previously sterile patients in whom anovulatory menstrual cycles had been demonstrated. The dosage was 20 ru of Upjohn's Gonadogen on the 9th, 10th and 11th days of the cycle, followed by 60 ru intravenously on the 12th day. Siegler[21] reports 28 cases; pregnancy occurred following treatment in 11 of these. In 8 of his cases, sterility was associated with anovulatory menstruation; ovulation was produced in 5 of this group, and pregnancy ensued in 3 of these. Hall[22] reports 24 pregnancies in 43 women treated with Cutter's Gonadin. Less encouraging is the recent report of Erving, Sears and Rock;[23] they obtained successful results in only one of 26 cases. In our own cases, the percentage of successful results has been low.

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The Role of the Eye in Autonomic Nerve Imbalance

GLENN S. LAMKIN, M.D.

THE vegetative or autonomic system comprises the striated muscles of the heart, the smooth muscle system, and all glandular structures of the body. All activities which are essential to maintain man as an individual are parts of this system. It is the one system in the body which has to be studied from the functional standpoint.

The autonomic nervous system is a peripheral system. The ganglia which contain the cells from which the true vegetative fibres arise are found without the central nervous system. They are arranged either along the spinal column as the gangliated cord, or more peripherally at convenient places for sending out nerve fibres to supply the various viscera. They are connected with the central nervous system, however, by connector nerves which arise from cells which lie in the lateral gray matter of certain segments of the spinal cord and in a similar position in the medulla and mid-brain. Certain ganglia, too, have been placed in the brain and cord, which serve as central stations for receiving and distributing impulses which are to result in the correlation and integration of acts of a complicated nature, affecting widely separated structures. These stations distribute impulses to both visceral and skeletal structures, thus bringing the body as a whole into a unity of action.

THE AUTONOMIC FUNCTIONS

The will has no power to call on the autonomic nerves for visceral effects, as it has in case of the skeletal nerves. The autonomic functions must be carried on, no matter whether the individual is awake or asleep, for they are essential to life.

The autonomic nerves are opposing systems. Most visceral structures are supplied by both the sympathetic and parasympathetic and when they meet in the same structures, one produces activity and the other inhibits activity.

Physiologists have proved that autonomic nerve impulses are transmitted by known chemical substances. According to Dale[1] and Loewi[2], chemical substances are released at autonomic nerve endings upon arrival of impulses. Stimulation of the vagus and other parasympathetic nerves cause acetylcholine to be released. This is a very unstable compound and it is immediately broken down by choline esterase. The opposing system of autonomic nerves, that is, most of the sympathetic fibres cause liberation of a substance closely allied with if not identical to adrenalin. The recent work of Dale[3] strongly suggests that acetylcholine is liberated at motor end plates of voluntary muscles. Eserine or prostigmin inhibits choline esterase, thus allowing more effective and prolonged action.

The Author

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The fundamental importance of the continuous balance between the more or less opposing influences, upon autonomic activity has long been known. Overbalance of the mechanism in the one direction or the other as seen clinically was studied by Eppinger and Hess[4] of Vienna, who popularized the terms vagotonia and sympathetonia. These should now be replaced by the more exact and descriptive terms cholinergia and adrenergia as suggested by Dale. An individual showing the characteristics of slow pulse, excessive sweating and salivation, indigestion of the hyperacidity type, hyperactive reflexes, tendency to allergy, dermagraphism may be termed cholinergic. These symptoms may be reproduced in a normal individual by administration of acetylcholine. Conversely, other individuals may be found who exhibit adrenergia, the signs of which are fast heart, vasomotor instability, perhaps some physiological elevation of blood pressure and atonic bowel. These signs may be induced in a normal individual by administration of adrenalin. This autonomic imbalance cannot always be strictly classified because excessive cholinergic activity causes the various adrenergic symptoms to be superimposed.

Various clinical diseases are caused by excessive sympathetic action in local areas e. g. Raynaud's disease, atrophic rhinitis, paroxysmal auricular tacchycardia, megacolon, etc. Excessive cholinergic activity is a very frequent form of autonomic imbalance e. g. bronchial asthma, urticaria, peptic ulcer, etc.

Clinical observation has suggested that the eye may play an important role in the regulation of autonomic balance. As previously mentioned strict classification into adrenergia and cholinergia is impossible, but there is considerable clinical evidence to justify saying in a broad sense that cholinergic individuals tend to be hyperopic, and andrenergic individuals tend to be myopic.

Submitted December 10, 1940.

A previous report[5] on peptic ulcer and refraction of the eyes bears out this relationship in that all the peptic ulcer patients had hyperopic errors of refraction. Further evidence in support of this contention is that all asthmatic patients had hyperopia. Onset of physical symptoms with the development of cataract changes in the lenses may be more than a coincidence. Autonomic imbalance in early presbyopia is another example suggesting possibility that the eye may be more than a visual apparatus.

Any attempt to explain these clinical observations is difficult, but certain experimental work has been done which permits the formulation of a tentative hypothesis. Myerson[6] has shown that the eye is capable of withstanding a dose of combined mecholyl and prostigmin which would be fatal under the skin and assumes that the drugs are absorbed and destroyed by the local tissues and structures. Also, that the eye partakes very little in effects when these drugs are injected under the skin. When he instilled mecholyl in presbyopic eye, the ability to read fine print resulted. Prostigmin caused the same reaction, showing that enough acetylcholine was constantly manufactured in the presbyopic eye, so that when the esterases were removed by prostigmin the effects of acetylcholine were produced. The esterases seemed to play an important role in ciliary muscle contraction. If these drugs cause contraction of ciliary muscle, it seems logical to assume that abnormal activity of the ciliary muscle by errors of refraction would cause an abnormal concentration of acetylcholine or choline esterase to be formed in the eye.

Just how these abnormal concentrations in the eye could upset the autonomic balance of the body is purely speculative, but experiments of Dikshit[7] suggests that transmission of central nervous system impulses may be on a chemical basis. The central nervous system is connected with the autonomic by connector nerves and by certain ganglia in the brain and cord which serve as central stations. Through this complicated mechanism will be found the detailed explanation of the role played by the eye in autonomic imbalance.

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Tuberculosis in Mental Hospitals

Tuberculosis is a problem of first order in every mental institution.

Patients suffering from tuberculosis are admitted to these institutions in a fairly large percentage without being so diagnosed. In addition to these, a relatively large percentage of patients develop tuberculosis while in residence, again without their disease being recognized.

Due to the contagious nature of tuberculosis, mental institutions should develop a definite and systematic tuberculosis control program, employing the tuberculin test and X-ray in diagnosis. These examinations should be conducted on all newly admitted patients immediately after admission and on the resident patients at least once annually.

Collapse therapy should be fully utilized in the treatment of the tuberculous psychotic, irrespective of the patient's mental deterioration.

Patients selected for shock therapy should be X-rayed before commencing treatment and rerayed at frequent intervals during and after such treatment.

Employes coming in close contact with the patients should be X-rayed every three months and the tuberculin reactors among the other personnel at least once annually.—M. Pollak, M.D., et al., Amer. Rev. of Tuber., March, 1941.

Role of the Psychiatrist in Criminal Courts

The Michigan Public Acts of 1939, with special reference to Acts No. 165 and 259, define and provide for the control of "criminal sexual psychopaths" and the latter for psychiatric examination of individuals charged with murder. These acts permit a deviation from the traditional punitive approach to crime and offer the psychiatrist an opportunity to present to the court an analysis of the individual as a whole. If the psychiatrist presents practical and conservative reports to the court it is hoped that a more intimate cooperation can be established in the fields of law, sociology, psychiatry and penology. The proposed ideal goal is the establishment of a fact finding court that would commit criminals to a treatment commission composed of educator, sociologist, psychiatrist and criminologist. This commission, after an adequate investigation, would determine and supervise the plan of treatment during intramural residence of the criminal and continue this supervision during the subsequent parole period. This scientific approach to the problem of crime would become eventually, more economical than the present punitive approach, as it is to be expected that recidivism would be curtailed and rehabilitation greatly enhanced.—Ralph M. Patterson, M.D., Ann Arbor; Jour. Mich. S. M. S., April, 1941.

Amniotic Hernia Containing Entire Liver, Gallbladder, Large and Small Bowel

G. J. SEARLE, JR., M.D. AND JOSEPH ENGMIRE, M.D.

TRUE congenital umbilical hernia is a rather rare condition. Ludwig says it occurs once in 6600 cases. It is more common in the male than in the female. About 300 cases have been reported in literature, the first by Ambrose Pare.

Congenital umbilical hernia must be differentiated from postnatal hernia and those hernia resulting from defective abdominal walls. A postnatal hernia is usually eccentrically located from the cord. It has a ring and has the same coverings as an adult hernia. While the congenital umbilical hernia has a ring and takes place through the center of the umbilicus with the cover consisting of mesenchymal tissue and Wharton's jelly, or in other words the components of umbilical cord.

Several theories have been given as to the etiology of congenital umbilical hernia. Meszáros is of the opinion that umbilical hernia into the cord is due to disproportion of the maternal pelvis which increases the curvature of the foetal back thus preventing the extension of the abdominal cavity and with the closure of the abdominal muscles the organs develop in the extra-coelom being excluded from the abdominal cavity.

Cullen has classified hernia into the umbilical cord as follows, the order not being given; but listed according to Thunig:

1. Umbilical hernia in the adult.
2. Serous umbilical hernia.
3. Cysts of the umbilicus.
4. Small umbilical hernia at birth.
5. Hernia into umbilical cord.
6. Congenital nipping of a hernial protrusion.
7. Amniotic hernia.

Thunig states that in the amniotic umbilicus there is a defective closing of the umbilical ring, the deficiency being closed in with amnion reflected from the cord. In the following case to be reported there was no defined ring, the amnion was fused with the peritoneum, and formed the covering of the hernia mass.

Amniotic-linea-alba has been described as a type of amniotic hernia, however it may exist without a definite hernia. In amniotic-linea-alba the deficiency of the linea-alba is replaced with amnion, which may be a very small area to the entire abdominal wall.

In amniotic hernia there is present an amniotic-linea-alba with herniation in which we find intestines, with parts of or entire organs; which normally develop in the true abdominal cavity.

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CASE REPORT

Baby girl, first child, case No. 40-2289. Admitted to the Mansfied General Hospital July 15, 1940, at 1:15 P.M. about 13 hours after having been born at home in Mt. Gilead, O., and brought to the hospital by Dr. Engmire who had the baby wrapped in a towel.

Examination revealed a newly born white infant weighing four pounds and thirteen ounces. The infant was crying and apparently hungry. There is present a large hernia mass into the cord which is recognized as an amniotic hernia about 11 cm. in diameter or about the same size as the infant's head. The entire liver, stomach, gall-bladder, large and small intestines; also some free fluid can be seen through the sac walls. The abdominal wall on both sides of the hernia is flat. The tied stump of the umbilical cord was located just above the symphisis pubis. The umbilical artery and veins could be seen extending upwards over the hernia mass to the lower border of the liver. Dr. Engmire reported that the cord had contained many cysts.

The hospital laboratory gave the following report: 35,556 W.B.C. 113 per cent Hb. 26 per cent stabs. 55 per cent seg. 10 per cent lympho. 1 per cent juvenile. with marked polychromasia. Rectal temperature was 97.8; there were no other deformities present and no evidence of pathology. Not wishing to delay the operative procedure a preoperative photograph was not taken, even though this was suggested by one of the onlooking surgeons. Operation by G.J.S.—Under ether anesthesia by Dr. Damron the entire chest and abdomen, also the thighs, were cleansed with ether, alcohol, ether and then painted with tincture of merthiolate and sterile drapes placed about the operative field. A transverse incision was made between the ligated cord stump and the lower border of the liver thus opening the sac so as to inspect the abdominal contents. When the sac was opened a quantity of sero-sanguinous fluid escaped. The sac was found to be formed by the fused amnion and peritoneum.

Many adhesions were found between the small intestine and the inside of the sac. These were freed by a piece of gauze over the operator's finger and gently wiping the bowel free from the

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Submitted December 11, 1941.

inside of the sac. A few adhesions between the bowel loops had to be cut. The sac was removed by the knife from below upwards on both sides, after ligating the urachus, taking a narrow margin of skin and the aponeurosis, hoping that the layers of the abdominal wall could be identified, and later closed separately. But the skin, aponeurosis and peritoneum were fused together and the recti muscles could not be recognized. The entire liver, gallbladder, stomach, large and small bowel were included in the sac contents. As the sac was removed these organs were outside the abdomen. Hot moist compresses were used to protect the abdominal viscera, while an attempt was made to free the sac from the surface of the liver.

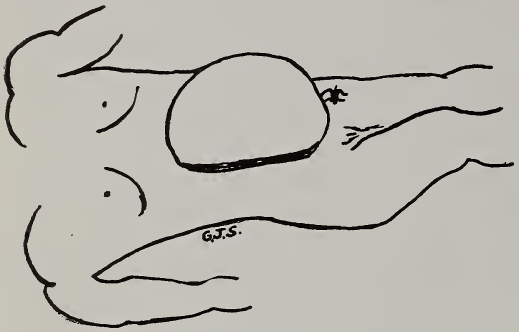

Fig. 1. Sketch showing Amniotic Hernia before operation.

No line of cleavage could be discovered and an attempt by sharp dissection with the knife was hopeless due to the thinness of the sac wall and the friability of the liver. The falciform ligament containing the umbilical artery and veins was ligated with plain No. 1 catgut at the free margin of the liver and the sac cut from the free border of the liver. The sac was dissected upwards around the edges of the liver taking a narrow margin of skin and thus the liver was free from the margin of the abdominal wall. But the liver was covered with amnion or the outside of the hernia sac, which could not be removed as stated above. Hence it had to be left on and thus contrary to all surgical principles a substance which formed the outer covering for the abdominal viscera had to be placed inside of the abdomen. The bowels were easily placed in the abdominal cavity but there was not room enough for the liver as the liver was wider than the abdominal cavity, the ribs were retracted upwards; even then there was not room enough. Pressure was made on the liver with hot moist sponges; this seemed to reduce the size of the liver possibly by forcing the blood from the liver. Then by raising the lower border of the liver forward and tilting the dome of the liver backward it was placed in the abdomen, in its normal position.

The aponeurotic-peritoneal layer was then picked up with Allis forceps and closed without drainage using a lock stitch of No. 1 chromic catgut. The skin was then closed with interrupted silk sutures, no attempt being made to have a straight suture line as it was necessary to conserve all tissue possible to enclose the abdominal viscera. The suture line was painted with tincture of merthiolate and sterile dressing applied with a tight bandage about the abdomen and the chest to support the abdominal wall. The infant was then returned to its bed and in good condition. During and after the operation the child's condition was satisfactory, the color and respirations were normal. Fifteen minutes after the operation it had reacted from the anesthetic and was crying heartily. Three hours later it was given one ounce of a mixture of one teaspoonful of lactogen and one ounce of water; this was retained. This formula was given every three hours. Twelve hours after the operation it had a meconium stool. The second postoperative day the temperature was 102; as soon as the hot water bottles were removed and some of the bed covers the temperature fell to 98.8. On the third postoperative day the formula was changed to Carnation milk one ounce and boiled water two ounces with one teaspoonful of Karo corn syrup. The weight was now five pounds and four ounces. Recovery was uneventful; the infant's skin sutures were removed on the tenth day. August 4th or the 20th postoperative day it was discharged from the hospital and its weight was six pounds, one ounce. The infant has been seen several times since its discharge from the hospital and on October 12 it weighed eleven pounds and its condition is satisfactory.

TREATMENT OF CONGENITAL UMBILICAL HERNIA INTO THE CORD

There is only one treatment and that is surgery which should be done immediately. As all unoperated cases die usually from peritonitis or paralytic ileus. It is surprising how an apparently hopeless case will often survive the ordeal of an operation. The sac should be opened first and its contents examined. No attempt should be made to reduce a congenital umbilical hernia into the cord. Adhesions should be liberated, the umbilical vessels should be ligated in the falciform ligament, and the urachus should also be ligated. If one can dissect out the layers of the abdominal wall and suture them separately it should be done; however, this can not always be accomplished. If one is encountered with this difficulty a through and through suture will suffice. Even a silkworm gut suture interrupted taking all the layers of the abdominal wall down to, but not including the peritoneum will be satisfactory.

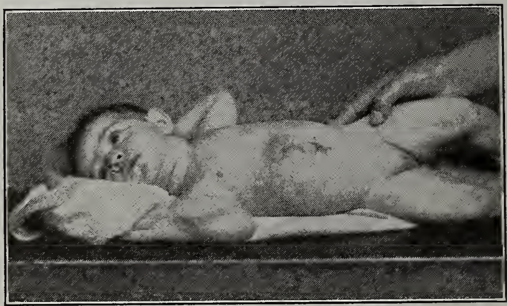

Fig. 2. Photograph of Infant after operation.

CONCLUSIONS

1. Amniotic hernia is a surgical proposition and immediate operation is necessary to maintain life.

2. A case is reported which was successfully

operated upon with recovery even with adverse conditions. Credit is due Dr. Engmire of Mt. Gilead, Ohio, the attending obstetrician for keeping this case from becoming infected, prior to admission to the hospital.

3. A description of the operative technique has been given which tells how the difficulties that were encountered in this case were overcome.

4. The amniotic covering of the liver was left attached to the liver, since it could not be removed, and the liver placed in the abdomen without a resulting peritonitis.

228 Park Ave. West.

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Acne Vulgaris

Acne vulgaris may be defined, in my opinion, as the disease which consists in tuberculoid inflammatory reaction to sebum which is excessive because of the patient's improper metabolism of lipoid. It is a pustular lipoidosis. In contrast to the mesodermal lipoidoses (xanthomas) acne vulgaris is a primarily epidermal lipoidosis with secondary inflammation. Acne vulgaris depends (1) on the excessive dietary intake of lipoid or lipochrome substances or both of which milk, milk products, pork, chocolate, carrot, orange and spinach are abounding sources; (2) on hormonal influences through the function of the thyroid gland in the control of lipemia, thyroid gland function being dependent on other endocrine apparatus and their balance and integrity; (3) on vitamin intake, through the need for vitamins in maintaining epithelial integrity, and through the antagonism between carotene and vitamin A on the one hand and thyroxin on the other; and (4) on iodine, in the excess of which hyperlipemia occurs in hypothyroid individuals but not in normal ones, and in the absence of which the thyroid gland cannot long function normally.

Sensitivity to iodide on the part of the patient with acne is due to his hypothyroidism. Give the acne patient iodine and thyroid extract in adequate amounts and he will not suffer eruption for his tendency to hyperlipemia is controlled with thyroid extract. In diet for acne I urge the use of iodized salt and it is tolerated.

I have found that a carefully designed low fat diet, conscientiously followed, is promptly effective in diminishing seborrhea. While untoward symptoms of lack of unsaturated fatty acids occur in rats on a strict low fat diet, a human being on the same diet suffered no damage but actually felt the better for it. I have seen no ill effects within four months from the low fat diets that have been followed by more than 300 of my patients with acne; in fact, they have been relieved of fatigability, constipation and mental depression to a noteworthy degree while their chief complaint gave ground. A few have developed difficulty with dark adaptation which has responded promptly to doses of vitamin A concentrates. All the constitutional symptoms of the patient with ordinary acne are due to his relative hypothyroidism. By "relative" I mean the inadequacy of his autochthonous hormone to cope with the quantity of lipoid he has been ingesting. Constipation is not a cause of acne; the acne patient is constipated for the same reason he has acne. Menstrual difficulties with acne are usually on the same basis and so is anemia. These are all symptoms of hypothyroidism.

Iodized salt should be used in cooking. Iodine is an essential food element in the absence of which trouble with the thyroid gland is inevitable. The diet must be followed strictly and continually. The diet is low in calcium and in pregnancy calcium must be provided. The diet is purposely low in vitamin A, but harmlessly for a period of four months in my experience.

Thyroid extract is indicated in all cases, given to tolerance without regard to the determination of basal metabolic rate or the chemistry of the blood. Not all, but most, patients tolerate at least a small dosage. It is especially needed if the patient (1) is depressed and melancholy; (2) wishes to sleep late in the mornings and is tired on arising, even when sleeping regularly eight or nine hours a night; (3) feels tired in the afternoon and feels generally overloaded by work that ought not be an overload; (4) is anemic, feels cold, is disproportionately uncomfortable in the winter, is constipated, gains weight too easily, is scant and irregular in menstural flow. Coffee in excessive amounts often masks some of these symptoms of hypothyroidism. In chronically fatigued, thin, worried patients who fight their "tired feeling" and suffer insomnia in consequence, thyroid dosage improves sleep, in part rids them of their nervousness and helps them to gain in appetite and weight.—Richard L. Sutton, Jr., M.D., Kansas City; Jour. Mo. S.M.A., Vol. No. 38, No. 2, February, 1941.

Treatment of Angina Pectoris and Coronary Artery Disease With Sex Hormones

R. W. BONNELL, M.D., CLARK P. PRITCHETT, M.D., and T. E. RARDIN, M.D.

EAGER to discover some therapeutic agent that gave better relief to patients with angina pectoris than the drugs now commonly employed, we began to use sex hormones in 1936. This was inspired by a remark of Schiller who, when speaking before an endocrine group in Columbus, Ohio, in 1936, stated that estrogen had a vasodilating property and had been used by some European physicians in the treatment of angina pectoris.

During the ensuing four years we have treated 23 patients with cardiac disease by administering sex hormones. Twenty-one of the patients had angina pectoris, cardiac pain being the cardinal symptom in each case. One patient had extreme weakness and exhaustion following an acute coronary occlusion, and another patient included in the series is an elderly man with hypertensive arteriosclerotic heart disease, congestive heart failure and cardiac asthma.

Eighteen men and five women comprise the group, their ages vary from 42 to 78 years. Seventeen patients are in an age group between 47 and 60 years. Five patients had hypertension. Four of the five women had associated climacteric symptoms, only three of the 18 men had associated climacteric symptoms.

Seven patients had suffered coronary occlusions before sex hormone therapy was started.

Patients were classified according to their functional capacity for physical activity according to the classification of the Criteria Committee of the New York Heart Association. Ten patients fell into Class II, having pain on ordinary physical activity. In Class III, that is, patients with marked limitation of physical activity, and having pain on less than ordinary activity, there were 10 patients. Three patients were classified as Class IV, these patients having anginal symptoms that occurred even at rest.

Each patient was seen in consultation by cardiologists, and the diagnosis of angina pectoris was confirmed by these observers.

Each patient had at least one electrocardiogram made before treatment was started. Nineteen of the 23 patients showed evidence of myocardial damage with coronary artery sclerosis in the electrocardiographic tracings. This was evidenced by characteristic T wave and QRS complex changes.

Of the four patients having normal electrocardiographic tracings, two had had previous coronary artery occlusions.

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The following two case summaries are typical of the type of patient treated and the results obtained.

Case 1. A white male, age 55, was first seen in 1936, having had severe substernal pain radiating to both shoulders and down the left arm, brought on by the slightest exertion, for eight months. An electrocardiogram showed coronary artery sclerosis and myocardial damage. Two thousand international units of estrogenic hormone was given twice weekly for several months, and finally once a month. In the four-year period 266,000 international units of estrogen have been used. Since a short time after onset of therapy, the patient has been symptom free.

Case 2. A white female, age 59, had angina pectoris with typical substernal pain radiating down the left arm, which was precipitated by exertion and relieved by rest. She had had these symptoms for two years and had twice been treated for acute coronary occlusions. An electrocardiogram showed coronary sclerosis and myocardial damage. A cardiologic consultant gave a very poor prognosis. Treatment with vasodilators gave no relief.

In the past four years she has received 431,000 international units of estrogen in intermittent series of injections. She is always free from anginal symptoms when taking estrogen and her symptoms recur when she ceases therapy. In the past few months diethyl stilbesterol orally has given relief in the same fashion as estrogen.

METHOD OF TREATMENT

Since we had no pre-arranged schedule of dosage each patient was treated in an individual manner predicated by symptomology and re-

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Submitted February 12, 1941.

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sponse. Both esrtogenic* and androgenic** hormones were used. Sixteen patients received only estrogenic hormone, five men received androgen only. Eleven men were treated with estrogens alone. All the women were treated with estrogenic substance exclusively. Two men received both androgenic and estrogenic substances.

The dosage of the estrogenic substance varied from 2,000 international units to 10,000 international units. Estrogenic substance was usually given two or three times weekly and then gradually either the size of the dose was decreased or the time interval between injections was increased.

Androgens were administered in somewhat the same fashion. A urinary concentrate known as virosterone was used, the initial dose varying from three to five capon units. The injections were given twice or three times weekly at first and then the dosage varied according to the patient's response.

Sex	No. Cases	Normal B.P.	Elevated B.P.	Pathological EKG	Associated Climacterics	Previous Relief with Vasodilators‡		Relief Symptoms with Sex Hormones				Occlusions After Treatment Stopped	Deaths—Both Occlusion†
						Poor	Fair	Complete	Excellent	Good	Poor		
Males	18	12	6	15	3	13	1	4	5	8	1	3	2
Females	5	3	2	4	3	3	1	2	0	3	0	0	0

‡ No Vasodilators used in five cases.
† One Death due to Syphilitic Heart Disease with occlusions.
† One Death due to second occlusion six weeks after last treatment.

Early in our study we used aminophyllin and erythrol tetranitrate, in addition to hormones. We soon learned that these drugs were not necessary to keeep our patients comfortable and free from anginal attacks.

Eleven patients were treated six months or less, six were treated for a year, four followed treatment from one to two years and two have been under treatment for four years.

Total treatment has varied from 40,000 international units of estrogen to 431,000 international units of estrogen and from 42 capon units up to 225 capon units of androgen.

RESULTS

Prior to receiving sex hormone therapy 16 patients had been treated with vasodilating drugs with poor results. Two patients had had fair results with these drugs.

In the group of 23 patients, improvement was noted in 22 during and after sex hormone which previously caused anginal attacks. Four men and two women had complete relief of symptoms while being treated. Five men had excellent relief but had occasional mild pains. Eight men and three women had a good result, that is, there were definitely fewer anginal attacks and exercise tolerance was definitely increased but these patients continued to experience at times, mild anginal attacks.

It was interesting to note that fatigue and dyspnea when present were benefited in the same proportion as was the anginal syndrome.

Only one patient failed to receive benefit from hormonal therapy. Treatment was unsatisfactory and there were environmental factors which tended to precipitate frequent anginal attacks.

In 12 cases continuous therapy was not pursued. Seven of this number had a recurrence of therapy. Improvement was judged by the patient's ability to perform without pain, tasks symptoms within a short time after therapy was stopped. However, five of this group have remained symptom free for several months after treatment was stopped.

Three patients suffered coronary occlusions during an interval when they were not receiving treatment. All had been benefited by hormonal therapy so far as relieving angina pectoris was concerned. Two of these patients died with the coronary attacks. The other patient was benefited by estrogenic therapy after his occlusion. He was having anginal attacks while convalescing, which were relieved when estrogen was resumed.

DISCUSSION

From the standpoint of pathologic physiology it is generally accepted that the cause of pain in angina pectoris is a disproportion between the supply and demand of blood by the heart muscle. Two conditions may give rise to this disproportion, one, an atheromatous narrowing of the coronary arteries which is frequently demonstrated at autopsy, and the other mechanism, consisting in theory at least, of a vasomotor instability capable of at least temporarily causing symptoms identical to those found in individuals with atheromatous coronary arteries. It is possible that both mechanisms may play roles in the production of anginal pain in many individuals.

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* Estramone—Endo Products, Inc.; Theelin—Parke, Davis & Co.

** Virosterone—Endo Products, Inc.

Considerable evidence has been collected by Gilbert[1] in support of a vasomotor mechanism as an etiologic factor in many cases of angina pectoris and coronary artery disease. Theoretically either a vasodilatation failure or a distinct vasoconstriction effect could result in a disproportion state in the coronary circulation, Rein, Porter, Maas, Anrep, Green, Von Bergmen, and de Takats, have all made valuable contributions in support of this etiologic factor.

Hall, Ettinger, and Banting have all shown anatomical changes occurring in the heart muscle of a dog by vasomotor activity, and Blumgart and Herrman[2] have shown necrosis occurring in the heart muscle when the flow of blood is arrested for a period of 25 to 45 minutes. The fact that sex hormones have vasodilating properties rests on sound experimental and clinical basis. Reynolds and Foster[3] have shown that estrogens produce dilatation in the minute vessels of the rabbits ear. Corbet, R., Ratschow, M., and Stechner, M. L., have found that Cyren, diethylstilbene would protect either male or female rats against the necrotizing effect of ergotamine tartrate but that estrogen would not protect the male.

Effkemann and Struver have shown that estrogens have a sympathecotropic activity in that they produce pupillary dilatation.

Recent publications have demonstrated that estrogens and androgens apparently produce dilatation in certain organic peripheral vascular disturbances. Herrman and McGrath[4] reported symptomatic improvement in 69 per cent of 16 patients with peripheral vascular disease. Reynolds and Foster have demonstrated in 20 adult males an effect which they believe is due to a dilating action in the small vessels beyond the arterioles when using estrogen.

Edwards, Hamilton, and Duntley[5] in a group of seven male patients, four with arteriosclerosis and three with Buerger's disease, have demonstrateed clinical improvement and objective improvement by spectrophotometric measurements. Their findings indicated a dilatation in the arterial blood supply of the skin.

All this work points to a mechanism that estrogens and androgens in some way effect vasodilation. Herrman and McGrath in their paper quote Reynolds, who in 1938 stated that there was a cholinergic effect possessed by estrogenic substances, namely the ability of the hormone to mediate peripherally through acetycholine action. The same mechanism may be effective in dilating the blood vessels of the heart.

In 1938 and again the past year Scherf[6] has pointed out an effect of hypo-ovarianism on the coronary arteries and myocardium in certain women. He believes these changes are the result of a deficiency of ovarian follicular hormone, and that they can be corrected by the administration of follicular hormone, but not by rest, vasodilators or sedatives.

Dr. Roy Scott in a recent address pointed out that coronary artery disease is only one aspect of a widespread vascular decay. This decay results in changes affecting four great body areas, the brain, the coronary arteries, the kidneys and the peripheral vessels. Other workers have pointed out the effect of sex hormones on the peripheral vessels. We call attention to a group of patients with coronary artery disease, who showed a remarkable improvement clinically while undergoing treatment with sex hormones.

This clinical study together with the experimental and clinical studies of other workers suggests the possibility that a deficiency in gonadal hormone, or an endocrine imbalance in certain individuals possessing an autonomic nervous system capable of an abnormal response, is the factor which leads to functional or organic changes in the vascular system during or after the climacteric period of life.

SUMMARY

Twenty-three patients with coronary artery disease, 21 of them having angina pectoris, were treated with sex hormones. Clinical improvement was noted in 22 of the 23 patients. Both estrogens and androgens were used.

Experimental evidence is cited which indicates that the sex hormones have a vasodilating property. It is thought that the improvement in this series of patients is due to a vasodilating property of the sex hormones acting on the coronary circulation.

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Crowded living conditions, mounting prices of necessities, increased mental, emotional and physical strain—inevitable by-products of industrial defense activities—are factors dangerously favorable to the increase and spread of tuberculosis.—Kendall Emerson, M.D.

Extensive Amebiasis

WILLIAM F. ASHE, M.D. and RALPH JOHANSMANN, M.D.*

CASE 133452. An unemployed white man of 60 years was admitted to the hospital November 18, 1939, complaining of inability to eat and of increasing weakness for the past eight weeks.

History: Approximately eight weeks before admission this man began to have anorexia, weakness and general malaise. At approximately the same time he began to complain of a dull boring pain around the right costal margin and upper abdomen. All of these symptoms increased in intensity and, at some time during this period, daily fever began to develop followed by profuse clammy sweats. Approximately one week before admission cough developed which increased the intensity of the right-sided pain; this was followed by marked shortness of breath. A few days before admission he began to have considerable difficulty in swallowing food. His chills and fever became daily occurrences and he was almost always covered by cold clammy sweat. He is believed to have lost approximately 20 pounds in weight during the period of his present illness.

The past history was difficult to obtain. Constant good health preceded the onset of his present illness, with the possible exception of a few signs of mild low-grade obstruction of the lower urinary tract.

Physical Examination: Temperature 99°. Pulse 100. Respirations 32. Blood pressure 130/90. He was a fairly well developed but poorly nourished white man lying on his right side breathing rapidly and appearing rather cyanotic. He was acutely and seriously ill. His skin was warm and unusually moist. The trachea was deviated to the left. The right half of the chest moved poorly and there were signs of a large amount of fluid in the right pleural space. There was marked tenderness along the right costal margin and the enlarged, smooth, tender liver extended 8 cm. below the right costal margin. The abdomen was otherwise normal. The only other physical findings were those commonly associated with senility.

Laboratory Data: Red blood cells, 3,050,000. Hemoglobin 11.5 grams. White blood cells, 13,800. The urine was normal. The Wasserman and Kahn tests were both strongly positive. X-ray examination of the chest showed all the normal lung markings on the right side to be completely obliterated by the presence of a large hydropneumothorax.

Hospital Course: The patient was taken to the operating room on the day of admission, and a closed drainage thoracotomy was done. A No. 22 rubber catheter was inserted into the chest and a rather large amount of thick, gray, odorless pus removed; 500 cc. of this material removed several hours later was described as rather brownish thin pus. Four days later the capacity of the cavity was found to be 1300 cc. The temperature fluctuated between 97° and 101° with a rapid pulse. Examinations of the chest from time to time showed that the amount of the fluid was diminishing and also that the right lung was completely collapsed. Three cultures of the material from the chest were made and all were sterile. There seemed to be a slow but gradual improvement until the 31st hospital day at which time the patient became drowsy and irritable but offered no specific complaints. The following day his right hand and arm became edematous and it was later found that this extremity was paralyzed. No other neurological disorders were found. In addition, at that time, he developed a rather severe diarrhea having 12 stools during a period of 24 hours, and some six or eight the following day. Rectal examination, which on admission had been negative, showed a rather firm induration all around the rectum as far as the finger could reach. The whole process felt like an inflammatory reaction. Blood urea nitrogen and CO_2 combining power were found to be normal. On the 33rd hospital day the temperature suddenly rose to 103.5° and the patient lapsed into a stuporous state. Physical examination at that time revealed nothing new in the neurological findings nor in the chest. The patient quietly died on the evening of his 33rd hospital day.

The clinical diagnoses at that time were: Chronic massive empyema on the right, cause not definitely determined; cerebral thrombosis on the left; enteritis of unknown etiology; latent syphilis.

Necropsy (N-39-550): Performed by Dr. George Gross.

Gross Examination: The body was that of a fairly well developed and poorly nourished, approximately 60-year-old white male, dead 9½ hours. The skin was yellow and numerous petechiae dotted the skin of the lower abdomen, both flanks, and the flexor surfaces of both arms. A trocar puncture wound was present in the right lateral chest wall at the 6th intercostal space in the posterior axillary line. On this side a large thick-walled cavity in the pleural space contained thin, creamy colored fluid and pushed the right lung against the mediastinum. The lining of this cavity was shaggy and its encapsulating fibrous wall averaged 7 millimeters in thickness. On the right the diaphragm was tightly adherent to the basal surface of the lung and to the superior surface of the liver. The trachea deviated slightly to the left but the heart and left lung were in normal positions.

The right lung, which was totally non-air-containing, weighed 1125 grams and was removed with the diaphragm and liver. The substance of the upper lobe was tough but in its basal portion there was a thick and firm-walled cavity 2 to 3 centimeters in diameter, filled with a yellowish-green material. Scattered throughout the middle lobe were many friable nodular masses of consolidated tissue. A large thick-walled multilocular cavity, measuring approximately 7 centimeters in diameter, replaced the basal half of the lower lobe and the contents of this cavity consisted of a greenish-yellow "purulent" material. This cavity did not communicate with the pleural space but a direct continuity of the inflammatory process was established through the firmly adherent diaphragm with a similar abscess cavity in the right lobe of the liver.

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This is the third of a series of "Case Records Presenting Clinical Problems," selected by Dr. R. S. Austin, Professor of Pathology. University of Cincinnati College of Medicine.

The pleural surface of the left lung was markedly reddened but free from exudate. The subcrepitant substance of this lung was darkly reddened and occasional friable nodular consolidated areas were scattered throughout the lower lobe.

In the right lower lobe of the large liver was a cavity, measuring, on the cut surface, 6x8 centimeters and filled with a flocculent, cheese-like material intermixed with a greenish-yellow, "purulent" material. The lining of this cavity was rough and its thick wall contained numerous small loculated cavities which varied from 1 to 4 millimeters in diameter. A small abscess, measuring 2x4 centimeters and directly continuous with the large cavity, extended into the liver tissue and seemed to invade one of the hepatic veins. The liver tissue was otherwise very friable, the vascular markings were obliterated, and the tissue immediately surrounding the abscess cavity was very mushy and light greenish-brown. The lining of the gall bladder was smooth and the extra-hepatic biliary passages were patent.

No abnormalities of the serosa of the gastroenteric tract were revealed. The mucosa of the sigmoid colon and rectum was edematous, dotted with many petechiae, and covered by a large amount of mucoid material streaked with a tarry substance. There were no evidences of ulceration.

Examination of the contents of the cranium revealed a slightly thickened dura, slightly congested cortical veins, moderate flattening of the surfaces of the frontal and parietal convolutions, and slight atherosclerosis of the arteries at the base of the brain. A somewhat friable markedly reddened area was present over the mesial and anterior surface of the right occipital lobe. Horizontal section of the brain revealed an inward extension of this lesion to involve the gray matter in this area, portions of the adjacent white matter, the anterior aspect of the lingual gyrus and a part of the terminal portion of the optic radiation.

Microscopic Examination: The abscess cavity in the liver was encapsulated by a thick wall of chronic granulation tissue in which there was an infiltration, especially in its inner portion, by moderate numbers of lymphocytes, plasma cells, and macrophages, many of the latter being very large and laden with lipoid droplets. There was proliferation of vascular endothelium and connective tissue together with the presence of dense, fibrous tissue and much blood pigment. There was no polymorphonuclear leukocytic response. The lining of the cavity was ragged and necrotic. Bile ducts were numerous in the wall, particularly in its outer portion, and in this area many liver cells were cut off and isolated, either singly or in groups, by fibrous tissue. The abscess extended into Glisson's capsule and throughout the markedly thickened, overlying diaphragm there was a chronic inflammatory reaction similar to that present in the wall of the liver abscess. The liver cells in the tissue adjacent to the abscess were atrophic or swollen and vacuolated. In this region the Küpffer cells were loaded with granules of blood pigment and there was an increase of connective tissue, an infiltration by lymphocytes, and an apparent increase in number of bile ducts in the portal areas. The liver cells remote from the abscess cavity were moderately swollen and contained many small and large fat droplets. In these areas there was also some increase of fibrous tissue and infiltration by lymphocytes in a few of the portal triads.

The wall of the empyema cavity consisted of a very thick layer of chronic granulation tissue. Some of the abscesses within the substance of the right lung were enclosed by a moderately thick wall of cellular fibrous tissue infiltrated by lymphocytes, macrophages, and a few polymorphonuclear leukocytes. Other abscesses which were present were of more recent development and were noted in areas of pneumonic consolidation. In these areas the alveoli were partially filled with macrophages and fibrin and the pulmonary framework along with the reacting elements were undergoing necrosis and liquefaction, with cavity formation. Phlebitis and arteritis with thrombosis were evident. Amorphous disintegrating tissue filled these cavities, several of which had ruptured into the smaller bronchi. The left lung was moderately congested and in its lower lobe were several recently formed necrotic lesions of the same nature as those described in the right lung.

A section including the lesion located in the right occipital lobe showed a large area of liquefaction necrosis involving the gray matter and some of the underlying white matter. A moderately dense macrophagic reaction was present in the meninges overlying the affected area. The white matter adjacent to the area of liquefaction was studded with multiple small collections of macrophages.

There was a patchy necrosis and sloughing of the mucosa of the colon and in areas this extended into the submucosa to the muscular layer. These ulcers were partially filled with disintegrated tissue and were surrounded by a reaction which was principally lymphocytic and macrophagic and only mildly polymorphonuclear leukocytic. The submucosal, muscular and serosal layers were all thickened and diffusely infiltrated by an active chronic inflammatory reaction. Amoebae were found in all layers of the colon, in the wall of the liver abscess, in the diaphragm and pleura, in the walls of the pulmonary abscesses, in the alveoli and bronchi of the lungs, and around the areas of liquefaction in the brain.

The principal pathological diagnoses were: Active chronic amoebic colitis; active chronic amoebic abscess of the liver with extension through the right diaphragm and amoebic empyema; multiple chronic and acute amoebic abscesses of the lungs; acute amoebic abscess of the brain.

CLINICAL DISCUSSION

Not infrequently in clinical medicine the physician learns more by his errors than by his successes. Commonly the clinician's errors are due not to lack of knowledge but to failure to see that which is before his eyes. Such was the case in the above clinical problem.

To begin with, one might justifiably say in most instances that the history given was "vague", "scanty" and "incomplete" (such were the remarks of the examining physician). Yet a careful study of these complaints would have led to a correct answer. In the disorder from which this man died, intrahepatic disease producing right costal pain, profound weakness, profuse sweats and occasional chills and fever without jaundice, is a classical history. As a complication, rupture of the intrahepatic process into the lung with the production of an empyema is the commonest of the fatal outcomes in untreated cases of this disease.

In respect to the physical examination, evidence of fluid in the chest unassociated with any history of resolving pneumonia, an enormous tender smooth liver, and pain and tenderness in the right costal margin, were neglected when the source of the empyema might have been obvious. After thoracotomy the finding of a completely collapsed right lung should have aroused suspicion that the empyema had an extra-thoracic origin. Careful study of the femoral venous pressure would probably have shown some degree of inferior caval obstruction.

At operation and shortly thereafter it was noted that the pus was odorless, later that it was brownish in color, and finally that on several cultures it was sterile; yet no effort was made to determine what was the nature of this "pus" or why it was sterile. Had it been examined under the microscope one would have discovered that it was not true "pus" at all, but necrotic amorphous material, one of the classical features in the liquefaction necrosis of the disease from which this man died. Later in his hospital course the development of an inflammatory lesion in the lower colon, associated with diarrhea, failed to arouse the suspicions of the attending physicians.

Finally, perhaps, the notion that the disease from which this man died is a tropical disease uncommon or unknown in temperate climates may have led the examining physicians to disregard some of the findings. This is a misconception. This disease is seen from one to ten times a year by astute clinicians in every city of large size in the United States. Doubtless it is missed nearly as often as it is found. True, it is more common in the south, but it is by no means unknown in the northern parts of the United States.

The clinical diagnosis should have been amoebic abscess of the liver with rupture through the diaphragm into the chest; amebic empyema and active amebic colitis; possible amebic brain abscess; latent syphilis. The therapy should have been simple aspiration of the liver abscess, aspiration of the chest fluid and a vigorous course of parenteral emetine. Amebic lesions are not true abscesses and they have been proved to respond better to this form of therapy than to any other. Surgical intervention usually means a 40 per cent mortality; conservative medical therapy a 2 per cent mortality.

PATHOLOGICAL DISCUSSION

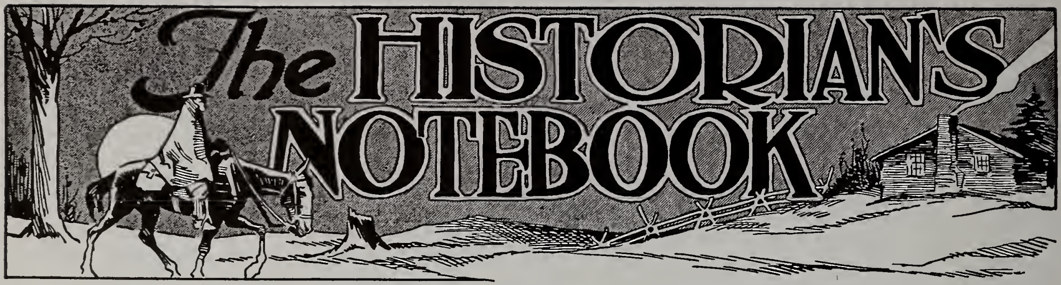
The pathological features of this case are characteristic of amebiasis well established and active in the colon and classically illustrate the common complications and progressive spread of the disease. Extension of the infection to the liver was by way of the portal route and upon establishment of the hepatic abscess the direction of spread can be traced through the right diaphragm into the chest with involvement of the lung and pleura. However, the macroscopic observation of possible invasion of one of the hepatic veins by the abscess in the liver and the presence of multiple acute abscesses not only in all lobes of the right lung but also in the lower lobe of the left lung suggest the possibility of supplementary spread by embolism. Since this former observation could not be confirmed microscopically and too because the pulmonary abscesses appeared as a liquefaction necrosis of areas of pneumonic consolidation with the thromboarteritis and thrombophlebitis being secondary, it is reasonable to assume the recent widespread extension throughout the lungs was by way of the air passages. The terminal cerebral lesion, which is one of the rare complications of the disease, was of course blood borne.

The histologic picture of the lesions throughout the viscera is quite typical of amebic infection in that there is much liquefaction necrosis and a moderate degree of inflammatory reaction by macrophages and lymphocytes. The abscesses in this disease, although called such, are, as indicated in the clinical discussion, not true abscesses because of the absence of purulent exudate. No polymorphonuclear leukocytes were present in the inflammatory reaction in the hepatic and cerebral lesions and the minimal response by these cells in the lesions of the colon and lungs is attributable to secondary bacterial invasion. The ease of demonstration of amebae in the histologic sections would seem to indicate the probable presence of considerable numbers of these organisms in the feces, in the material from the empyema cavity, and in the sputum during the life of this patient.

ANTI-SCURVY VITAMIN C

Ability to manufacture anti-scurvy vitamin C in the body and ability to resist invasion of the tuberculosis germ are apparently linked. Man requires vitamin C in his diet because he is unable to manufacture it in his body. Patients with tuberculosis seem to use more vitamin C than normal. Men, monkeys and guinea pigs are all susceptible to tuberculosis and unable to manufacture vitamin C. Dogs and rats are able to manufacture vitamin C and are resistant to tuberculosis.—T. W. B. Osborn, M.D., and J. H. S. Gear, M.D., Nature, June 22, 1940.

During the year 1940 approximately 35,000 people were killed and 1,300,000 injured in automobile accidents. Deaths from this cause averaged almost 100 per day.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

The Beginning of Medical Organization and Medical Practice at Warren, Ohio[1]

JAMES J. TYLER, M.D.

The Author

● Dr. Tyler, Warren, Ohio, is a graduate of Western Reserve University School of Medicine, 1912; member American Association of the History of Medicine; Ohio State Archaeological and Historical Society; Ohio Presbyterian Historical Society; President, Trumbull County Historical Society; Historian, Grand Lodge F.&A.M. of Ohio.

UNDER a law enacted by the General Assembly of Ohio and effective February 8, 1812, the counties of the state were divided into seven medical districts. A place of meeting in each district was also specified by the law. The Sixth District comprised the counties of Trumbull,[2] Geauga, Portage, Ashtabula, Cuyahoga, and Huron. The physicians of this district were directed to meet in Warren on the first Monday in June, for organization as a society and the election of officers and delegates to a convention to be held at Chillicothe in the following November.

These counties were located in Northeastern Ohio, in what had formerly been the Connecticut Western Reserve[3] of the Northwest Territory. Warren was settled, April 17, 1799, by Captain Ephraim Quinby, of Washington County, Pennsylvania. Less than 15 months later, July 10, 1800, Governor St. Clair erected the entire Western Reserve as old Trumbull County and designated Warren as the capital. Warren remained the seat of justice of this vast area until after Ohio became a state in 1803 and until Geauga County was set off in 1805. Portage, Ashtabula and Cuyahoga counties were erected in 1808 and Huron County in 1809. For more than a quarter of a century, however, Warren remained the principal town of the Western Reserve.

DISTRICT MEDICAL MEETING HELD AT WARREN, JUNE 1, 1812

The only remaining record of the early medical meetings held at Warren is found in the newspapers of that period. In the first issue of the first newspaper of the Western Reserve, the *Trump of Fame*, published at Warren, June 16, 1812, it is recorded that: "In conformity to the laws of the state of Ohio, regulating the practice of physic and surgery, a number of the members of the Medical Society of the Sixth District, convened at Warren, Trumbull County, Ohio, on Monday, the 1st day of June, when — Doct. John W. Seeley was chosen chairman; Doct. David Long,[4] secretary, and Doct. Shadrack Bostwick,[5] treasurer.

The society then proceeded to elect members to meet the general convention at Chillicothe, on the first Monday of November next, and the following persons were chosen, viz; Docts. Charles Dutton,[6] Peter Allen,[7] and Joseph DeWolf.[8]

The following question was then propounded for the discussion of the society at the next meeting, viz: 'From whence and in what manner does the blood issue that is expectorated in pleurisy that terminates favorably?'

The meeting then adjourned to meet again in Warren on the first Monday of February next.

John W. Seeley, Chairman
David Long, Sec. "

Probably because of the difficulty of travel and the amount of time involved to make the journey on horseback, Drs. Dutton, Allen and DeWolf were not in attendance at Chillicothe on November 2, 1812, at which time the convention of the

"Medical Society of the State of Ohio" was to have been held. As set forth by Patterson[9] only five delegates, two from the First District and three from the Second District made their appearance. Since the law specified a quorum of ten members no convention was held.

The next meeting of which there is record also appears in the *Trump of Fame*, January, 1813:

"The Sixth Ohio Medical District met at Warren and made choice of John W. Seeley, chairman and Daniel Upson, secretary. At the request of Dr. Allen the following request was published:

In this time of alarm and danger (typhus epidemic) it is requested that Physicians of the Western country communicate their sentiments on the prevailing epidemic, as to the best mode of cure, and the symptoms whereby to ascertain the disease in its commencement.

By order of the Medical Society
John W. Seeley, Chairman
Daniel Upson, Secretary."[10]

Subsequent newspaper accounts indicate that district meetings continued to be held at Warren for many years and, at least until the year 1828, Dr. John W. Seeley continued to preside over the district. He is first referred to as "president" in a notice which was published in the *Western Reserve Chronicle*, Warren, Ohio, October 18, 1816 and which states: "The meeting of the Physicians of the Sixth Medical District will take place at Warren, on the first Monday in November next.

John W. Seeley, President."

In 1817 the censors of the Sixth District were: Drs. Jeremiah Wilcox,[11] John W. Seeley and Peter Allen, of Trumbull County; Dr. Joseph DeWolf, of Portage County; Dr. Orestes K. Hawley,[12] of Ashtabula County; Dr. David Long, of Cuyahoga County; and Dr. Lyman Fay,[13] of Huron County. The *Chronicle*, October 23, 1817, states:

"It is proposed that the Censors of the Sixth Medical District, appointed by the law at the last Session of the Legislature, shall meet on the evening preceding the first Thursday in November to make arrangements for the ensuing day, at which time the Medical Society are to convene at Warren agreeably to law." In 1821 the number of the medical districts was made to correspond with the number of circuits of the Court of Common Pleas and Warren found itself in the Third District. The five censors of the district were: Dr. Henry Manning,[14] of Trumbull County; Dr. Orestes K. Hawley, of Ashtabula County; Dr. Isaac Swift,[15] of Portage County; Dr. David Long, of Cuyahoga County; and Dr. Gardiner, of Huron County. A Medical Notice in the *Chronicle* states: "Dr. Asahel Brainard[16] and George R. Espey were examined November 2, 1820. Dr. Brainard's theme was on Fever; Espey's on Dysentery. They were given diplomas. John W. Seeley, pres.; John B. Harmon, sec.; Charles Dutton, treas."

Under a new law passed by the General Assembly, February 26, 1824, Trumbull County was included in the Eighteenth Medical District. The *Chronicle*, June 11, 1824, states: "The physicians of the 18th Medical District convened at the house of Benjamin Towne in Warren, May 25, 1824, agreeably to the late law regulating the practice of medicine to organize themselves into a society by electing John W. Seeley, president; Isaac Swift, vice-president; John B. Harmon, treasurer; William Heaton,[17] secretary. Tracy Bronson,[18] Rufus Pierce (of Portage County), Peter Allen, Benjamin Palmer,[19] and Samuel L. Whipple were elected censors for the ensuing year."

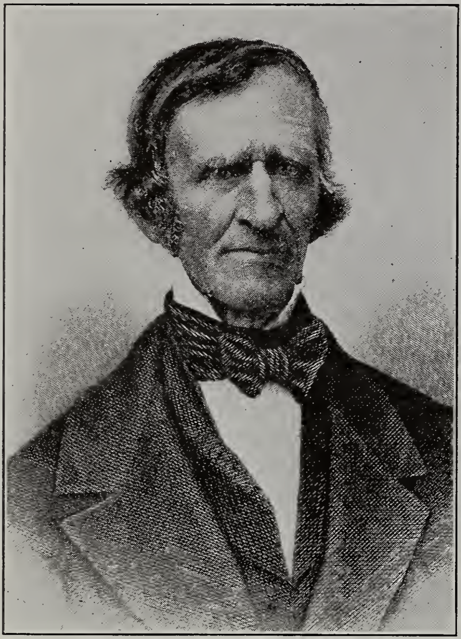
Residence of Dr. John W. Seeley

Further re-districting placed Trumbull County in the Ninth Medical District and a notice in the *Chronicle* reads: "Ninth Medical District of Ohio held at Warren, May 27, 1828. John W. Seeley, president; Charles C. Cook,[20] vice-president; Charles Dutton, treasurer; John B. Harmon, secretary. Sylvanus Seeley, Peter Allen, Henry Manning, Tracy Bronson, and Elijah Flower,[21] censors. Homer Tylee, Hiram Hamlin admitted; Dr. Steadman was examined and found to be an ignoramus and rejected. Dr. Henry Manning was appointed to attend the Medical Convention to be held in Columbus. Joseph Truesdale[22] was appointed a beneficiary to attend a course of lectures in Cincinnati for the year 1828. J. B. Harmon, Secretary." As set forth by Deitchman,[23] Dr. Henry Manning was present at the meeting of the "General Medical Society of the State of Ohio," when it convened at Columbus, January 5, 1829. A further reference to the Ninth Medical District is found in the *Chronicle*, October 28, 1830, which states: "The memebers of the Ninth Medical District of Ohio who have not paid their annual tax for

1829-30 are requested to pay the same to the secretary or treasurer, Dr. Manning on or before the 1st of December next. By order the Society. Calvin Pease, Jr., Secretary.[24]"

DR. JOHN W. SEELEY (1771-1840)

In the year 1803, Dr. John Williamson Seeley, of Jefferson, Green County, Pennsylvania, located in Howland township, Trumbull County, where he cleared a farm and in the following year removed his family to the new location. He was a large, portly man of light complexion, full of fun and a good story-teller. As a physician he stood well in his day and for many years had a large practice. His ride—on horseback and with saddle bags—included the village of Warren. The house which he built on his farm in Howland township is still standing. It is said to have been three years in the course of construction and was built from seasoned timbers obtained from trees on his farm. In the War of 1812 he attained the rank of general and also filled the positions of state representative in 1807 and state senator in the term of 1816-17. Dr. Seeley was an earnest promoter of the Pennsylvania and Ohio canal and when the first packet boat arrived at Warren, May 23, 1839, a general holiday was declared. In the afternoon a banquet was held at Benjamin Towne's hotel at which Dr. Seeley served as toastmaster. On completion of the canal to Akron, where it connected with the Ohio canal, another celebration took place. Dr. Seeley was a leading spirit of the Warren delegation, until he was suddenly seized with apoplexy. An old account states that he died of over-jubilation. He is buried in an obscure hillside cemetery on a part of the farm he originally owned. His monument inscription reads: "Memorial to John W. Seeley, M.D., who died Aug. 7, 1840 in the 69th year of his age. Suddenly it came and left few moments agonizing pangs for those he loved so well." His wife, Elizabeth Williams Seeley, died in 1845 and is buried beside him. His son, Sylvanus Seeley[25] practiced medicine at Warren, Ohio. On January 4, 1808, Dr. John W. Seeley and Judge George Tod were delegates from Erie Lodge at Warren to a convention held at Chillicothe, at which time the Grand Lodge of Free and Accepted Masons of Ohio was organized.



DR. JOHN B. HARMON

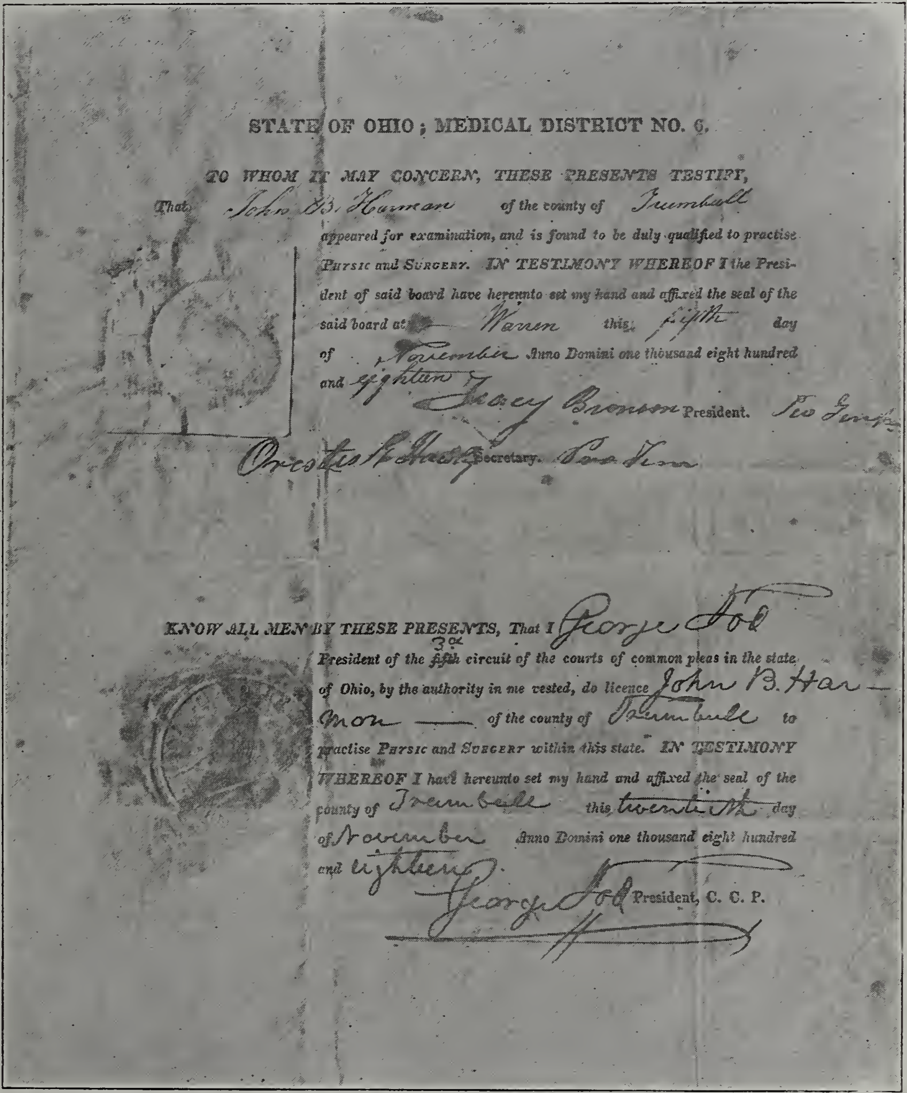
DR. ENOCH LEAVITT (1775-1827)

In 1804 Dr. Enoch Leavitt came from the State of New Jersey and settled at Leavittsburg, Warren township, Trumbull County. He is mentioned as a "dispenser of roots, herbs and calomel." Dr. Leavitt was a substantial citizen and accumulated over a thousand acres of land in Warren township. He was a subscriber, August 25, 1809, to a fund raised for the purpose of erecting the first court house in Warren for the use of Trumbull County. The building was erected in 1815 and replaced by a second court house, begun in 1852 and completed in 1854. Dr. Leavitt is buried among other members of the numerous Leavitt family in Lover's Lane cemetery. He was the son of Enoch (1746-1815) and Elizabeth (1752-1827) Leavitt.

DR. JOHN BROWN HARMON (1780-1858)

The pioneer physician of the village of Warren proper was Dr. John Brown Harmon, of Rupert, Vermont. His father Reuben Harmon, was a soldier of the Revolution, an extensive land holder and had been a member of the Vermont legislature. In 1785, he acquired the sole right of minting copper coins for the independent State of Vermont, and maintained that right for a decade. Charles Edward Crane in his recent book, "Let Me Show You Vermont," writes: "Vermont coined its own money in the days when it was a sovereign republic, and if worse came to worse, Vermont could do it again; for in the Vermont Historical Museum at Montpelier are the dies, the money scales, and all the paraphernalia necessary—at least all that was necessary in the early days, when one Reuben Harmon, Jr., of Rupert was granted a license to coin copper into Vermont money." One hundred and fifty years ago, March 4, 1791, Vermont was admitted as the first State of the Union, after the original thirteen.

In 1796 Reuben Harmon purchased from the heirs of General Samuel Holden Parsons five hundred acres of land embracing the well-known Salt Springs[26] in Weathersfield township, Trumbull County, visited his possessions in the following year and in 1798 brought his family to what was then the far West. Here John Brown Harmon assisted his father in the manufacture of salt, which was carried on extensively.



STATE OF OHIO; MEDICAL DISTRICT NO. 6.

TO WHOM IT MAY CONCERN, THESE PRESENTS TESTIFY,

That John B. Harman of the county of Trumbull appeared for examination, and is found to be duly qualified to practise Physic and Surgery. IN TESTIMONY WHEREOF I the President of said board have hereunto set my hand and affixed the seal of the said board at Warren this fifth day of November Anno Domini one thousand eight hundred and eighteen

Tracy Bronson President. Pro Tem

Orestes K. Hawley Secretary. Pro Tem

KNOW ALL MEN BY THESE PRESENTS, That I George Tod President of the 3d ~~fifth~~ circuit of the courts of common pleas in the state of Ohio, by the authority in me vested, do licence John B. Harmon —— of the county of Trumbull to practise Physic and Surgery within this state. IN TESTIMONY WHEREOF I have hereunto set my hand and affixed the seal of the county of Trumbull this twentieth day of November Anno Domini one thousand eight hundred and eighteen

George Tod President, C. C. P.

Diploma of Dr. John B. Harmon

The son had commenced the study of medicine with his uncle, Dr. Josiah Blackmer, of Dorset, Vermont, in 1796. In 1804 Dr. Enoch Leavitt settled in Leavittsburgh and he resorted to him at intervals for medical instruction. In 1806 he returned to Vermont and continued his medical studies under Dr. Blackmer until 1808, when he came to Warren where the remainder of his long and useful life was spent. Of Dr. Harmon's early years in Warren, it is stated in a sketch of the Harmon family[27] that "his practice rapidly increased, and although the fees were low, yet they enabled him to meet his large expenses easily. Part of the time he boarded at the tavern kept on Market street, by Col. William W. Cotgreave, by whom he was commissioned surgeon of the second regiment, Fifth brigade, Fourth division of the militia of the State of Ohio, on the 10th day of August, 1813. This commission was repeated by Stephen Oviatt, colonel, February 5, 1817, and by Governor Worthington, July 17, 1818, only his brigade was the first, and the rank of captain was assigned to him. He was present at the attack on Fort Mackinac in 1813. . . . Near the close of the war he resumed his practice in Warren, and from this time on his rides extended greatly, reaching to Cleveland, Painesville, Ashtabula on the lake, and a long distance in all directions. . . . One night his favorite 'Buck Rabbit' broke through the ice with him in crossing Mosquito Creek, near Captain Joseph Marvin's. The game horse, struggled through the ice and up the steep miry bank. The doctor rode, with his clothes froze to him, some four miles on, sat beside a woman in labor and rode home without food the next morning." Dr. Harmon early supplied himself with a set of obstetrical instruments and was expert in their use. His last case of obstetrics was in July, 1857.

"His appearance," states Willson,[28] "has been thus described: "Six feet tall, with a round, full chest, a bundle of muscle and nerve of the finest quality, a high, square forehead jutting over deep bluish-gray eyes." "During his life," writes Allen,[29] "Dr. Harmon endured several serious injuries and illnesses, but a remarkable constitution enabled him to accomplish an enormous amount of professional labor, notwithstanding these disabilities. He stood high as a physician and surgeon among his contemporaries, and performed several remarkable operations. One of these was the removal of several cancerous masses from the under side of the liver in the case of a Mrs. Norton. The patient recovered sufficiently to ride a distance of three miles to Warren. This was in 1822, before the discovery of ether."

"A large part of his life regular sleep was unknown to him. . . . He learned to sleep on his horse, or in his sulky, and when he lay down, instantly fell asleep. . . . In medicine he was cautious and conservative, but progressive and ready to adopt new views and remedies so far as reason and experience showed them to be of value. In 1814-16 he abandoned venesections in camp fever. . . . Ether and chloroform he hailed as boons to the suffering. . . . He was bold and skillful in surgical operations, having a hand which remained steady to the last. . . . The late Tracy Bronson, M.D., said of him: "He had the best judgment of us all. I thought I had much science, but when we got in a pinch and didn't know what to do, he could see at a glance, and help us out."[30]

Although the diploma of Dr. Harmon which has been preserved and which was signed by Drs. Bronson and Hawley and Judge Tod[31] is dated 1818, yet he appears to have been active in the district prior to that time for his name appears as 'secretary' of a meeting held October 27, 1818, while the diploma was not signed until November of the same year.

Dr. Harmon was married February 26, 1822, to Sarah Dana of Pembrook, New York. He had never seen her, but the engagement was arranged by a mutual friend. He drove on in a double sleigh for his bride, was introduced to her, married, and the next day began the homeward journey. Though consumated in this speedy manner, his wife proved to him a fitting helpmate in every sense. Sarah Dana Harmon was a sister of Anderson Dana, a resident of Trumbull County, and the father of Junius Dana of Warren and Charles A. Dana, well-known editor of the New York *Sun*.

A FAMOUS MALPRACTICE SUIT

In 1838 Dr. Harmon, Dr. John W. Seeley and his son Sylvanus Seeley were sued for malpractice, in having, as was said, unnecessarily amputated a leg which had been crushed by a timber rolling down from the top of a cabin that was being raised. "The injured leg in question had been seen by Dr. Harmon and on the next day he had called in council the two Seeleys, and it was after deliberate consideration that the amputation was undertaken." The case attracted wide attention from the importance of the principal involved and the ability of the legal council, and on the part of the medical profession was unanimously considered as an outrageous piece of persecution. The Hon. Joshua R. Giddings, with the help of Benjamin Wade, Milton Sutliff, and Rufus P. Ranney conducted the prosecution. A suit had been previously successfully prosecuted against Dr. Orestes K. Hawley, of Ashtabula County, by Giddings and Wade.[32] The defense was made by David Tod and Rufus Paine Spalding. In the trial depositions were taken in Ohio and the principal medical centers of the east, and a large amount of money was expended. A second trial was necessary to decide the suit, and in this the jury rendered a unanimous verdict for Dr. Harmon, with little delay.

Dr. John W. Seeley died before the case was settled, but generously directed his heirs to pay the lawyers for the defense. This amounted to about two-thirds of the expense of the trial but the remaining third incurred in securing depositions, cost Dr. Harmon more than he ever made in surgery. Of this malpractice suit it was said[33] that "it showed the public the essential impudence of such prosecutions, and has resulted in a better understanding of medical responsibility.

(Continued in July issue)

How long ago it seems. In 1859 Mr. Richard C. Downing, Superintendent of Sanitary Inspection of New York City said, "I consider it very unjust to give the health inspector of the City of New York power to quarantine a house where there is smallpox."—Better Times, Dec. 13, 1940.

Reminiscence of an Early Ovariotomy

HOWARD JONES, M.D., CIRCLEVILLE, OHIO

NOTHING is known of the art and science of surgery up to the period of written history, except what we gather from small evidences which we find in the instruments and the bones of prehistoric people, the trephines in the Peruvian skulls being outstanding examples. It is, however, far from my purpose to follow the history of surgery, to show its triumphs and its shortcomings, but rather, in a small way point out how surgery of a certain type existed for centuries, was forgotten, then revived, and finally became an everyday procedure.

Numa Pompilius, the second ruler of Rome, made a law that no woman should be buried if dying in childbirth, unless her abdomen had been opened and an effort made to save the child. Pliny relates that Scipio Africanus was brought into the world by abdominal section. According to Roman mythology the God of Physic was cut from his mother's womb and the life of Bacchus was saved the same way. Thus medicine and alcohol are each indebted to Caesarian section. The great Caesar, who was the cause of a tragedy which is described in "Plutarch's Lives", was born through an abdominal section. Plutarch says:—

> "But as soon as Butas was gone he (Cato, the younger) took his sword and stabbed it into his abdomen, yet not being able to use his hand so well on account of the swelling (from an injury the day previous) he did not immediately die of the wound, but struggling fell off the bed, and throwing down a little mathematical tablet that stood by made such a noise that the servant hearing it cried out. And immediately his son and his friends came into the chamber where, seeing him lie weltering in his blood, a great part of his bowels out of his body, but himself still alive and able to look at them, they all stood in horror. The physician went to him and would have put in his bowels, *which were not pierced*, and sewed up the wound. But Cato recovering himself, and understanding the intention, thrust away the physician, plucked out his bowels and tearing open the wound immediately expired."

This quotation, and many others which might be made, clearly shows that abdominal surgery was not uncommon in the days of Cato, and that the seriousness of perforation of the intestines was appreciated. Abdominal surgery was forgotten. Long centuries elapsed before it was seriously taken up by William Hunter in 1762. Kings College had already placed a ban upon the operation of abdominal section for tumors, but the French surgeon L'Aumonier dared, in 1782, to operate for an ovarian cyst. In this country Dr. McDowell of Kentucky, in 1809, did the first operation for ovarian cyst. A few years thereafter he performed 12 additional operations. In England Lazars, in 1823, did the first ovariotomy and after this the operation was in bad repute and discredited by nearly all eminent surgeons the world over. It remained for Spencer Wells, in 1857, to re-establish the operation upon a firm basis, but as late as 1873 very few sections had been done in America for abdominal growths.

I graduated in medicine in 1876 when the germ theory of disease was in its infancy and there was not much being said about abdominal surgery. There was a country doctor near my home town who claimed success in the removal of ovarian cysts. A slender spinster was his third patient. She lived in the State of New York and an eminent New York surgeon told her she had an ovarian cyst, and that it would be fatal to attempt its removal. Having heard of the country doctor, by a circuitous route, she concluded to visit him in the hope of relief. The M.D. assured her that he could remove the tumor with safety, so accordingly she went to Circleville, Ohio, to the home of a relative to prepare for the ordeal.

Dr. Ralph Morden of Circleville, a homeopathic physician, took charge of the case and the following week the operation occurred. I was asked to give the chloroform, and after careful consideration, but with some misgivings, I consented. I confess there was a feeling that I was getting into bad company, associating medically with a homeopathic physician and an ovariotomist. One sinning greatly in little things if at all, the other an arch offender in big things according to Hoyle. But I was young, enthusiastic and ready to take a chance as such an opportunity had never before offered and might never again. Accordingly in the forenoon of a pleasant day, in a poorly lighted room which I think had served as dining-room but now was to serve the double purpose of operating-room and bed-room, the patient was placed upon a kitchen table and the operator stood by with knife in hand. Upon

The Author

● Dr. Jones, Circleville, Ohio, is a graduate of Ohio Medical College, 1876; Member American College of Physicians; member of staff, Berger Hospital, Circleville.

the floor by his feet were two wooden tubs from the cellar, tubs such as Monday's wash was done in. One was for the waste and the other was partly filled with clear warm water and several large sponges like those used at that time for washing buggies. These sponges were brought by the Doctor in a handbag and were thrown into the tub of water. There was also near by a stand upon which the Doctor placed his instruments and dressings.

As soon as I gave the word that the patient was ready the Doctor made an incision over the line of the tumor, which was on the left side, and had it exposed. He then cut the sac and caught much of the fluid in a bucket, that remaining in the abdomen was soaked up with sponges which were then used to keep the intestines back from the field of operation. The Doctor then endeavored to apply his personally invented clamp to the pedicle, the first time he said he had ever used it, and as there were no adhesions this was soon accomplished and the cyst cut away from the clamp. Unfortunately the clamp failed to clamp tight enough and the hemorrhage was fast and furious until a ligature could be placed around the stump. Considerable time was wasted by the failure of the clamp, which the Doctor promised to improve before his next operation. After the bleeding was stopped, the blood in the abdomen was soaked up by means of the two sponges and the abdominal incision was sewed up.

The time consumed in the operation I do not know, but to me, responsible for the anesthesia and dubious as to the outcome of the surgery it seemed very, very long. Finally a binder made from a piece of an old sheet was secured about the abdomen of the patient and she was lifted into the bed in the corner of the room. We all breathed easier, for the patient had not died upon the table and the operation had been a success.

The night following the operation a messenger came with word for me to go at once to visit the patient as the abdominal bandage had slipped, and, using the words of the messenger, "her guts were out in the bed". I felt the situation was probably exaggerated, in any event it seemed no more than fair that Dr. Morden should be the attendant and have all the glory which might accrue from the case. Accordingly, I referred the messenger to Dr. Morden. About daylight Dr. Morden greatly excited came with his horse and buggy and insisted that I go with him and share the glory as the patient's wound had opened and her intestines were really and literally out in the bed. Upon careful examination we found some of the stitches had failed to hold when the bandage loosened and the patient was in great distress with every appearance of passing on. We were not prepared to sew up the wound even if we had known how, and we did not know how for we had had but this one lesson in abdominal surgery. Something had to be done, so we used what little horse sense we possessed. A non homeopathic dose of morphine was given hypodermically, the patient was placed upon her back and with our clean (?) hands we replaced the cold intestines through the hole where they had crawled out. I wish to relate that this was no easy job, but we put them back and held them with some strips of beeswax plaster and a new binder until the arrival of the operator in the evening.

I had not been out of college very long at this date and I recalled that according to Plutarch, Cato was fearful that the surgeon when he arrived would put back his intestines and thus save his life. So I took courage, but not very much for things looked as if the patient would soon die. But as has often happened since, my judgment was wrong, I had underestimated the vis medicatrix naturae. The patient made a good recovery and lived many years to finally die of cancer of the uterus.

After this experience I had much less respect for the peritoneum and the intestines than I was taught to have. There was a lesson to me in this primitive surgery which I have never forgotten and from which I have often profited. Here was apparently an unlearned man groping his way along a condemned road without the benefit of aseptic surgery. He had vision and consequently confidence in himself. He cared little for criticism of his day because he felt that he was beyond and ahead of it. Whether a student of history or not I do not know. However, he had learned that the peritoneum and intestines would stand rough handling and much abuse. As I remember Dr. Dunlap,* the operator, he was a slow man. The day he operated his muscles co-ordinated poorly, but he was inspired by a profound belief that his operation for ovarian cyst was a life saver. Undoubtedly he had vision and courage beyond his day. At first unrecognized and condemned by eminent city surgeons, some years later his cameo portrait was seen on bronze medals attached to the ribbons of the delegates to the Ohio State Medical Convention and they were worn with pride.

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* Editorial Note—Alexander Dunlap, A.M., M.D. (1815-1894) graduated from Cincinnati Medical College in 1839 and practiced in Highland and Brown Counties before locating in Springfield, Ohio in 1856. He was president of the Ohio State Medical Society in 1868, and served as one of the vice presidents of the American Medical Association in 1877. From 1874 to 1885 he filled the chair of Gynecology and Surgical Diseases of Women at Starling Medical College, Columbus.

Dr. Dunlap was the first Ohio surgeon to perform an ovariotomy (1843). During his career he performed 428 abdominal sections of which 16 were hysterectomies, with 83 per cent recovery.—Transactions, O.S.M.A., 1894.

Action of the Ninety-Fourth Ohio General Assembly on Bills of Special Interest to the Medical Profession

(SUPPLEMENTAL REPORT OF THE COMMITTEE ON PUBLIC RELATIONS AND ECONOMICS)

OHIO'S Ninety-Fourth General Assembly which convened on January 6 concluded its work on May 16.

From the viewpoint of the medical profession, this session of the Legislature was one of the most important sessions in many years. Approximately 125 proposals having some health or medical angle were considered, including House Bill 51, the enabling act for medical service plans, sponsored by the Ohio State Medical Association.

As pointed out in the May issue of *The Ohio State Medical Journal*, House Bill 51 was passed by the House of Representatives on April 2 by a vote of 110 to 8, and by the Senate on April 24 by a vote of 32 to 2. It was signed by Governor Bricker on May 6 and will become effective on August 5, 1941.

CO-AUTHORS COMMENDED

Supplementing what has been said in its regular report, the Committee on Public Relations and Economics wishes to commend Miss Margaret A. Mahoney, Cleveland, who introduced the bill in the House of Representatives, and Senator Lawrence A. Kane, Cincinnati, who managed the measure in the Senate. The profession owes them a vote of appreciation for their efficient work and personal interest on behalf of House Bill 51. Also, the profession should be appreciative of the support the bill received from 142 members of the General Assembly, many of whom took an active personal interest in winning votes for the measure among their colleagues.

Many individuals played a part in the enactment of House Bill 51. Much credit should be given to the legislative committeemen and officers of most of the county medical societies who worked many hours "back home" where votes are actually won or lost; to members of the Sub-Committee on Legislation who coordinated the activities of the local committeemen; to members of the Committee on Medical Service Plans who worked week-end after week-end prior to the introduction of the bill in drafting the proposal and in planning the successful public relations campaign on behalf of the measure; to Mr. Stichter, our legal counsel; and to members of the Headquarters Office Staff for their work on tactics and procedure as the bill traveled through the General Assembly and in carrying on the promotion campaign on a state-wide basis. Members of the Committee on Public Relations and Economics are not seeking bouquets but for the sake of the record it should be stated that at the request of The Council and the committee, Drs. Skipp, Paryzek, Smith and Hein, represented the State Association at no less than seven hearings held by committees of the General Assembly on House Bill 51. Obviously, each appearance necessitated a trip to Columbus which entailed a sacrifice on the part of each of the four representatives but which they were glad to make in the interest of the bill.

HARD BATTLES WON

The drive to obtain the passage of House Bill 51 was not an easy one. For reasons best known to themselves, a number of influential groups opposed the bill from start to finish. Principal opposition came from representatives of the Ohio Farm Bureau and the C.I.O. However, this opposition collapsed at the critical points in both the House and Senate as the vote indicates.

A real job in support of House Bill 51 was done, as the outcome proves. The same may be said for the legislative activities generally of the State Association since January 6. Representatives of the State Association and county societies were successful in convincing members of the General Assembly that several bills which would have been detrimental to public health in Ohio should not be passed. Also, our organized support was partly responsible, at least, for the enactment of a number of constructive health proposals.

Appended is a list of some of the other health and medical bills and miscellaneous measures of particular interest with their status at the close of the session indicated:

Barney J. Hein, M.D., Toledo, Chairman,
H. M. Platter, M.D., Columbus,
Ralph M. Watkins, M.D., Cleveland,
E. O. Swartz, M.D., Cincinnati,
O. J. Walker, M.D., Youngstown,
Wm. M. Skipp, M.D., Youngstown, ex-officio,
Harry V. Paryzek, M.D., Cleveland, ex-officio,
Parke G. Smith, M.D., Cincinnati, ex-officio.

SENATE BILLS

Senate Bill 25, to make appropriations for the care of the insane in private detention hospitals during 1939-40. **Enacted.**

Senate Bill 26, revision of relief act. **Senate Commerce and Labor Committee.**

Senate Bill 50, to provide that cities need not have a board of health. **Senate Health Committee.**

Senate Bill 84, to make procedure for appeals from actions of State Medical Board conform to general appellate procedure. Passed by Senate. **House Judiciary Committee.**

Senate Bill 116, revision of probate code. **Enacted.**

Senate Bill 118, revision of Pharmacy Practice Act. **Enacted.**

Senate Bill 122, to provide that city health district employees shall be under Civil Service. **Enacted.**

Senate Bill 132, compulsory physical education in schools. **Senate Calendar.**

Senate Bill 133, re-organization of State Welfare Department into four divisions, one of which will be Division of Mental Diseases. **Enacted.**

Senate Bill 141, to provide person applying for marriage license must submit to physical examination and serological test for syphilis and present statement of physician that he or she does not have syphilis in communicable stage in order to obtain marriage license. **Enacted.**

Senate Bill 142, to make serological test for syphilis of pregnant women mandatory. **Senate Calendar.**

Senate Bill 157, to make Ohio laws relative to aid for the aged conform to Federal statutes. **Enacted.**

Senate Bill 173, to provide for administrative procedure for Division of Mental Diseases, State Welfare Department. **Enacted.**

Senate Bill 201, to provide for compulsory "test for death". **Senate Judiciary Committee.**

Senate Bill 216, amendments to statutes relative to the Initiative and Referendum to prevent fraud and irregularities. **Enacted.**

Senate Bill 229, to provide State Department of Health shall not interfere if a city does not have a board of health, except in cases of epidemic and emergency. **Senate Health Committee.**

Senate Bill 232, to provide for regulation of buildings in unincorporated portions of a county, except farm buildings. Aimed at "shanty towns". **Enacted.**

Senate Bill 244, to provide hospitals may file liens in personal injury cases to collect costs of hospitalization of plaintiff. **Senate Judiciary Committee.**

Senate Bill 250, to provide for inspection and regulation of tourists' camps. **Senate Health Committee.**

Senate Bill 260, Christian Science bill. **Senate Health Committee.**

Senate Bill 266, revision of the state plumbing code. **Senate Commerce and Labor Committee.**

Senate Bill 301, to authorize charter cities now operating health department without board of health to continue to do so. **Enacted.**

Senate Bill 309, to create a state institutional building authority. **House calendar.**

Senate Bill 323, revision of state narcotic act. **Senate Health Committee.**

Senate Bill 324, to create commission to study administrative practices of various state departments. **Enacted.**

Senate Bill 360, to permit bond issues at special or general elections until December 31, 1942, for replacements or additions to municipal hospitals. **Enacted.**

Senate Bill 368, to create commission to study plans for remodeling or rebuilding schools for the deaf and the blind. **Enacted.**

Senate Joint Resolution 15, to provide for commission to study possible changes in the state health laws. **House Rules Committee.**

HOUSE BILLS

House Bill 12, to prohibit the sale and use of fireworks, except by special permit, after August 1, 1941. **Enacted.**

House Bill, 31, to create a Bureau for the Physically Handicapped. **House Welfare Committee.**

House Bill 43, to provide for the regulation of food, drugs and cosmetics shipped in intra-state commerce; similar to Federal Act. **House Judiciary Committee.**

House Bill 45, school districts may jointly employ school physicians and dentists and to provide practical method for compensating them. **Enacted.**

House Bill 49, to create a nurses' examining and licensing board. **Enacted.**

House Bill 54, protection of dogs. Would interfere with scientific research. **House Health Committee.**

House Bill 55, companion measure to House Bill 54. **House Health Committee.**

House Bill 59, recodification of the tuberculosis laws. **Enacted.**

House Bill 73, to authorize townships not connected with the mainland to construct, acquire, lease or rent a home for physician and maintain such dwelling. **Enacted.**

House Bill 97, revisions of the Dental Practice Act. **Enacted.**

House Bill 101, recodification of the vital statistics law; especially to provide method whereby persons now unable to obtain copy of birth certificate may establish proof of citizenship. **Enacted.**

House Bill 161, medical care by boards of education. **House Education Committee.**

House Bill 198, to permit Medical Board to

Governor Bricker Signs House Bill 51, the Enabling Act

THE above photograph was taken in the office of Governor Bricker a few moments after he had placed his signature on the enrolled copy of Amended House Bill 51, the enabling act for medical service plans, sponsored by the Ohio State Medical Association in the Ninety-Fourth General Assembly.

The group which witnessed the signing of the bill and furnished the background for Governor Bricker, shown seated at his desk, was composed of the following, reading left to right: Executive Secretary Charles S. Nelson; Mr. Wayne E. Stichter, Toledo, legal counsel for the State Association; Dr. Harry V. Paryzek, Cleveland, President-Elect; Miss Margaret A. Mahoney, Cleveland, member of the House of Representatives, who introduced the bill; Dr. Barney J. Hein, Toledo, chairman, Committee on Public Relations and Economics; Dr. Parke G. Smith, Cincinnati, Immediate Past-President and chairman, Committee on Medical Service Plans; Dr. William M. Skipp, Youngstown, President; and Senator Lawrence A. Kane, Cincinnati, who managed the bill in the Senate.

Amended House Bill 51 was signed by the Governor on May 5 and will become effective on August 5.

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charge $35.00 instead of $25.00 for giving examinations to applicants for license to practice medicine; $60.00 instead of $50.00 for issuance of license through reciprocity; and to charge a fee of $5.00 for executing credentials. Will produce several thousand dollars additional revenue which may be appropriated to the board for employment of a third inspector and additional office personnel. **Enacted.**

House Bill 299, to authorize special levies outside 10-mill limitation for operation of tuberculosis hospital. **Enacted.**

House Bill 301, to establish one health board for each county. **House Health Committee.**

House Bill 303, to provide for sterilization of mental defectives. **House Reference Committee.**

House Bill 311, to provide for a separate board to examine and license chiropractors. **House Health Committee.**

House Bill 315, to revise the laws relating to the duties of coroners. **House Judiciary Committee.**

House Bill 329, to provide for appointment of two osteopaths to the State Medical Board. **Killed by House Health Committee.**

House Bill 372, townships may jointly build and operate a hospital on vote of residents of townships. **Enacted.**

House Bill 380, to redefine duties of state director of health. **House Health Committee.**

House Bill 406, to provide per diem and mileage for members of county board of health. **Enacted.**

House Bill 414, alternative forms of county government. **House Judiciary Committee.**

House Bill 474, to provide for the annual registration of osteopaths by State Medical Board. **Enacted.**

House Bill 475, to make free choice of physician mandatory in any health program supported in whole or in part by public funds. **House Judiciary Committee.**

House Bill 522, to provide for reporting of cases of inflammation of the eyes of the newborn, for administration of prophylactic, and treatment in serious cases under the direction of the Commission for the Blind. **Enacted.**

House Bill 558, "agreed" Workmen's Compensation Bill. **Enacted.**

House Bill 582, to provide for the licensing and regulation of board homes for the aged and physically handicapped. **Enacted.**

House Bill 600, to authorize sanitary districts to carry on mosquito control and eradication programs. **Enacted.**

House Bill 601, revision of the laws relating to blind relief. **Enacted.**

House Bill 602, to provide for the establishment of county welfare departments. **Defeated in House.**

House Bill 655, Christian Science bill. **Defeated in House.**

House Bill 662, to authorize special tax levy for care of indigents in hospitals. **House Welfare Committee.**

Minnesota Alumni Reunion

The Alumni Association of the University of Minnesota Medical School will hold a before-dinner social hour at the Hotel Cleveland, Cleveland, from 5:30 P.M. to 7:30 P.M., Wednesday, June 4, during the Annual Meeting of the American Medical Association.

Examinations for Appointments In Medical Corps, U. S. Navy

The next examination for appointments as Assistant Surgeon, U. S. Navy (Lieutenant, junior grade, Medical Corps, U. S. Navy), will be held at all major Naval Medical Department activities on August 11 to 15, inclusive. Applications for this examination must be in the Bureau of Medicine and Surgery, Washington, D. C., not later than July 15, 1941.

Applicants for appointment as Assistant Surgeon must be citizens of the United States, more than twenty-one (21) but less than thirty-two (32) years of age at the time of acceptance of appointment, and graduates of a class "A" medical school who have completed at least one year of intern training in a hospital accredited for intern training by the Council on Medical Education and Hospitals of the American Medical Association.

A circular of information listing physical and other requirements for appointment, subjects in which applicants are examined, application forms and other data pertaining to salary, allowances, etc., may be obtained from the Bureau.

An examination for appointment as Acting Assistant Surgeon for intern training in Naval Hospitals accredited for intern training by the Council on Medical Education and Hospitals of the American Medical Association will be held at all major Naval Medical Department activities on June 23 to 26, inclusive. Students in class "A" medical schools who will complete their medical education this year are eligible to apply for these appointments, and if successful will receive their appointments approximately two months after the date of the examinations. Students in class "A" medical schools who will have completed their third year of medical education this year are eligible to take this examination, and if successful will receive their appointments on or about July 1, 1942, after they have completed their medical education.

Applicants for appointment as Acting Assistant Surgeon for intern training must be citizens of the United States, more than twenty-one (21) but less than thirty-two (32) years of age at the time of acceptance of appointment. Acting Assistant Surgeons are appointed for a period of eighteen (18) months. After the appointee has served as an intern in a Naval Hospital for twelve (12) months, he is eligible for and may take the examination for appointment as Assistant Surgeon, U. S. Navy.

Assistant Surgeons and Acting Assistant Surgeons for intern training are appointed in the rank of Lieutenant (junior grade), Medical Corps, U. S. Navy. The pay and allowances for an officer of this rank total $2,699 per year if he has no dependents, and $3,158 per year if he is married or has dependents.

Many Ohio Physicians Will Take Part in Scientific Assembly and Exhibits at Cleveland Session of A.M.A., June 2-6

OHIO physicians will figure prominently in the 92nd annual session of the American Medical Association, to be held in Cleveland, June 2-6, inclusive, and because of its location this year an unusually large number of Ohioans is expected to attend.

Opening session of the House of Delegates is scheduled for 10 a.m. Monday, June 2, in the ballroom of the Hotel Statler. At 8 p.m. Tuesday, June 3, the first general meeting of the Scientific Assembly will be held. Section meetings will be held Wednesday, Thursday, and Friday, June 4, 5, and 6. All sessions, except the business sessions, will be held at the Cleveland Public Auditorium.

Under the chairmanship of Dr. Clyde L. Cummer, a committee of 30 Cleveland physicians has been at work on local arrangements for meeting places, housing, registration, finance, publicity, etc. The personnel of this group was published in the May issue of *The Journal.* A complete listing of all details concerning the Cleveland session may be found in the April 26 number of *The Journal of the A.M.A.*

SECTION SESSIONS

Sections which will convene at 9 a.m. are: Practice of Medicine; Obstetrics and Gynecology; Laryngology, Otology, and Rhinology; Pathology and Physiology; Preventive and Industrial Medicine and Public Health; Urology; Orthopedic Surgery; and Anesthesiology.

Those which will meet at 2 p.m. are: Surgery, General and Abdominal; Ophthalmology; Pediatrics; Pharmacology and Therapeutics; Nervous and Mental Diseases; Dermatology and Syphilology; Gastro-Enterology and Proctology; and Radiology.

At the opening general meeting Tuesday evening Dr. William M. Skipp, Youngstown, president of the Ohio State Medical Association, will officially welcome the A.M.A. visitors to Ohio. Gov. John W. Bricker will also deliver an address of welcome as will Mayor Edward Blythin, of Cleveland.

Among the general scientific meetings will be a program presented by Cleveland physicians at 2 p.m. Monday in the Music Hall, Arena Floor, Public Auditorium. Participants in this program will be: Harold N. Cole, R. C. McKay, Harry Hauser, S. O. Freedlander, Thomas E. Jones, D. M. Glover, Harry Goldblatt, and Roy W. Scott. S. P. Mengel will be chairman, and Russell L. Haden will preside.

OHIOANS ON PROGRAM

Among other Ohio physicians who will take part in scientific sessions of the A.M.A. program, both general meetings and section meetings, are the following:

A. Graeme Mitchell, Cincinnati; Albert A. Sabin, Cincinnati; John A. Toomey, Cleveland; B. K. Wiseman, Columbus; Charles A. Doan, Columbus; Paul I. Hoxworth, Cincinnati; Edward Woliver, Cincinnati; Walter G. Stern, Cleveland;

STATE ASSOCIATION 1941 MEETING TO CONSIST OF TWO SESSIONS OF HOUSE OF DELEGATES IN CLEVELAND DURING A.M.A. MEETING

AS has been announced in previous issues of *The Journal,* the Ninety-Fifth Annual Meeting of the Ohio State Medical Association, the week of June 1 in Cleveland, will consist only of two business sessions of the House of Delegates inasmuch as the Annual Session of the American Medical Association will be held in Cleveland the same week.

The House of Delegates of the Ohio State Medical Association will meet on Tuesday afternoon, June 3, at 4 o'clock in the Rose Room, Main Lobby Floor, Hotel Cleveland, and on Wednesday evening, June 4, 6:30 o'clock in the Main Ballroom, Mezzanine Floor, Hotel Cleveland. The latter session will be opened with a complimentary dinner for delegates, who may obtain tickets for the dinner when they register and receive their delegate badge.

All members of the Ohio State Medical Association who are Fellows of the American Medical Association may attend the Scientific Assembly and the Scientific Exhibit, the feature attractions of the A.M.A. meeting. Application for Fellowship may be made at the A.M.A. Registration Headquarters in Cleveland upon presentation of State Association membership card and a check for $8.00 to cover Fellowship dues, which include annual subscription to *The Journal of the A.M.A.*

Arthur H. Bill, Cleveland; Derrick Vail, Cincinnati; Albert L. Brown, Cincinnati; A. D. Ruedemann, Cleveland; Henry M. Goodyear, Cincinnati; Paul M. Moore, Jr., Cleveland; Edward D. King, Cincinnati; Fred W. Dixon, Cleveland; Myron F. Metzenbaum, Cleveland; H. Jerry Lavander, Cincinnati; E. Perry McCullagh, Cleveland; Johnson McGuire, Cincinnati; Tom D. Spies, Cincinnati; C. A. Mills, Cincinnati; J. M. Hayman, Cleveland; Carl J. Wiggers, Cleveland; Frank A. Hartman, Columbus; Philip E. Piker, Cincinnati; W. James Gardner, Cleveland; Howard D. Fabing, Cincinnati; James R. Driver, Cleveland; John E. Rauschkolb, Cleveland; Paul Gyorgy, Cleveland; Theodore L. Bliss, Akron; L. F. Huffman, Cleveland; Joseph P. Evans, Cincinnati; James Joel Joelson, Cleveland; Leo Patrick Dolan, Toledo; Herbert Beach Wright, Cleveland; Thomas Pollock Shupe, Cleveland; James A. Dickson, Cleveland; Theodore A. Willis, Cleveland; Walter C. Hill, Cleveland; Rudolph S. Reich, Cleveland; Joseph J. Kurlander, Cleveland; Walter A. Hoyt, Akron; Adrian E. Davis, Akron; Frank E. Hamilton, Columbus; George M. Curtis, Columbus; John T. Murphy, Toledo; George W. Crile, Cleveland; Frederick W. Clement, Toledo; B. Burdell Sankey, East Cleveland; Rolland J. Whitacre, East Cleveland; Dennis E. Jackson, Cincinnati; Claude S. Beck, Cleveland; and John K. Potter, East Cleveland.

SPECIAL DEMONSTRATIONS

The special exhibit on fractures which has been a feature for the past several years will be continued at the 1941 meeting under the same committee. Dr. Carl H. Lenhart, of Cleveland, is local representative for the fracture exhibit, and the following Ohio physicians will serve as demonstrators:

C. Glenn Barber, Cleveland; Ralph G. Carothers, Cincinnati; P. C. Doran, Akron; Henry B. Lacey, Columbus; Rudolph S. Reich, Cleveland; Samuel L. Robbins, Cleveland; Alexander M. Steinfeld, Columbus; and James R. Tillotson, Lima.

For the second year there will also be a special exhibit on lame backs under the guidance of an advisory committee which includes the following Ohio physicians: Theodore Willis, of Cleveland; E. Harlan Wilson, Columbus; and Walter J. Zeiter, Cleveland. Among the demonstrators at this exhibit will be the following Ohioans:

C. Glenn Barber, Cleveland; Albert L. Bershon, Toledo; Herbert L. Brumbaugh, Dayton; F. H. Clark, Cleveland; Clyde W. Dawson, Columbus; Joseph A. Freiberg, Cincinnati; Maxwell Harbin, Cleveland; Clarence H. Heyman, Cleveland; W. Richard Hochwalt, Dayton; H. W. Kendall, Dayton; Henry B. Lacey, Columbus; C. S. Lowendorf, Youngstown; Wilbur H. McGaw, Cleveland; Fowler B. Roberts, Akron; Louis M. Starin, Lakewood; and Theodore H. Vinke, Cincinnati.

Ohio physicians who will have other exhibits at the meeting are: Russell L. Haden and Joseph Lucas, Cleveland; Howard Dittrick, Cleveland; J. Warrick Thomas and C. R. K. Johnston, Cleveland; William B. Wartman, Cleveland; D. M. Glover and Arnold F. Sydow, Cleveland; Lawrence N. Atlas, Cleveland; George W. Crile, Jr., Cleveland; Ralph M. Watkins, Cleveland; W. W. Greulich, Cleveland; Albert D. Rudemann, Cleveland; Lorand V. Johnson and Robert E. Eckardt, Cleveland; C. W. Engler, S. C. Missal, and H. S. Reichle, Cleveland; Paul Gyorgy, Cleveland; Norman C. Wetzel, Cleveland; Henry J. Gerstenberger, Cleveland; J. Victor Greenebaum, Theodore K. Selkirk, and Samuel Brown, Cincinnati; E. Perry McCullagh, E. J. Ryan, and D. Roy McCullagh, Cleveland; R. K. Straus, S. R. Gerber, M. E. Cowan, and A. J. Kazlauckas, Cleveland; Clara Raven, Youngstown; Benjamin S. Kline, Cleveland; Richard A. Bolt, Cleveland; Bruno Gebhard, Cleveland; James J. Joelson and Charles L. Hudson, Cleveland; Harry R. Trattner, Cleveland; Charles C. Higgins, Cleveland; James A. Dickson, J. I. Kendrick, W. James Gardner, A. T. Bunts, and W. A. Nosik, Cleveland; Walter A. Hoyt, Adrian E. Davis, and George Van Buren, Akron; and John T. Murphy and C. E. Hufford, Toledo.

One of the motion pictures which will be shown in the exhibit hall through the week of the meeting will be a film on "Repair of the Harelip" which was made by Dr. D. M. Glover, of Cleveland.

Toledo Hospital Clinic Day

Dr. A. H. Sanford, professor of clinical pathology, University of Minnesota and Mayo Clinic Graduate School, Rochester, Minn., was guest speaker at the Third Annual Clinic Day of the Toledo Hospital, May 9, at Toledo. His subjects were: "Treatment of Laryngeal Carcinoma"; "The Value of the Clinical Laboratory in the Diagnosis of Diseases of the Liver"; and "Quantitative Methods in the Anemias". Toledo physicians who participated in the clinical pathological conference and diagnostic and treatment clinic included: Dr. L. C. Grosh, Sr.; Dr. B. H. Steinberg; Dr. W. F. Peck; Dr. M. E. Goodrich; Dr. L. F. Smead; Dr. E. C. Mohr; Dr. B. H. Carroll; Dr. M. D. Haag; Dr. O. E. Todd; Dr. T. C. Kiess; Dr. Richard Hotz; Dr. John R. Davis; Dr. O. K. Muhme; Dr. G. H. Reams; Dr. G. T. Booth; Dr. C. L. Felker; Dr. I. B. Winger; Dr. S. H. Patterson; Dr. G. F. Denyes; Dr. E. G. Galbraith; Dr. J. A. Lukens; Dr. J. L. Kobacker; Dr. L. C. Grosh, Jr.; Dr. Matthew Ginsburg; Dr. Paul M. Holmes; Dr. B. S. Dunham; Dr. L. E. Payne; Dr. E. W. Huffer; Dr. A. R. Klopfenstein; Dr. J. A. Magoun. Dr. T. C. Kiess was chairman of the committee which arranged the program.

Physicians Should Renew Federal Narcotic Permit by July 1 To Avoid Penalty; Importance of Records Stressed

OF great importance to physicians who prescribe or dispense narcotic drugs is the annual registration with the United States Internal Revenue Department and the payment of the one-dollar federal narcotics tax on or before July 1. Under provisions of the Harrison Act, initial applications for permits to prescribe and dispense compounds of opium and coca leaves may be made at any time, but physicians already holding such permits must renew them each year on or before July 1.

According to officials of the Narcotics Bureau, this statute is now being enforced more strictly than ever before in an effort to reduce delinquency. It is now the policy of the Bureau to impose a penalty on every physician who prescribes, dispenses, or possesses narcotics after his permit has expired. In every case of delinquency the physician is required to file an Offer in Compromise (the federal method of settling out of court) and to pay a cash penalty in accordance with his record of delinquency.

MANY PENALIZED

Attachés in the Ohio offices of the Narcotics Bureau say that during the past year a surprisingly large number of Ohio physicians were thus penalized because they were negligent about renewing their narcotics permits by the required date.

Applications for re-registration must be made on Form 678, signed by the applicant physician in the presence of a notary public, an official of the Internal Revenue Department, or two qualified witnesses. Copies of these forms are customarily mailed in May to all registered Ohio physicians together with brief instructions for filling them out.

Each application must be accompanied by a notarized inventory, on Form 713, of the narcotics drugs possessed by the applying physician on the date of application.

Delinquent applicants are required by law to pay a 25 per cent ad valorem penalty in addition to whatever penalty may be assessed through the Offer in Compromise.

SPECIAL PERMIT FOR CANNABIS

Prescribing, dispensing, and administering cannabis requires a special separate permit and the payment of a one-dollar tax fee. This registration is also done through the Collector of Internal Revenue and must be done annually before July 1.

Failure to comply with any of the provisions of the Harrison Narcotic Act subjects the offending person to a possible maximum penalty of $2,000 fine or five years in prison or both. Conviction of violating this federal statute or the state uniform drug act in Ohio entails suspension or revocation of the license to practice medicine and surgery by the State Medical Board.

Physicians who wish to obtain copies of Regulations No. 5, which explain procedure under the Harrison Act and its provisions, should request them from any district Collector of Internal Revenue. A summary of this material, suggested by the Narcotics Bureau, includes the following 10 important points:

TEN VITAL POINTS

1. Re-register annually on or before July 1.
2. If you move your office, notify the Collector of Internal Revenue at once.
3. Don't try to buy narcotic drugs on your own prescription; use an official order form.
4. When you need a narcotic order book, send the requisition (Form 679) with 10 cents to the district Internal Revenue office.
5. Your narcotic order form will be filled by a wholesale dealer, except for one ounce or less of aqueous or oleaginous solutions of 20 per cent or less, which will be filled by a retailer.
6. Show your registry number on prescriptions for narcotic drugs.
7. If you maintain two offices, register each.
8. If you intend to discontinue your registry, notify the Collector of Internal Revenue in ample time to receive and execute his instructions before June 30.
9. Report stolen narcotics immediately to the Narcotic Agent in your district.
10. Death of any registrant should be reported at once to the Collector of Internal Revenue, who will issue instructions for disposing of the narcotics on hand.

RECORDS SHOULD BE KEPT

It is extremely important that physicians keep complete and accurate records of narcotic drugs which they dispense. These records should be made on the day the drugs are dispensed and should show the name and address of recipient patients and the kind and quantity of drugs they received. These records also should be kept for at least two years after date of dispensing.

Although it is not required that records be kept of prescriptions for narcotics, it is considered highly advisable to do so. Where office systems do not provide for this as a part of routine clinical records, physicians should, for their own protection, keep account of these prescriptions.

Progress Being Made on Deferment of Medical Students and Interns; State and Local Preparedness Committees Act

As a result of direct action on two fronts during the past month, efforts to safeguard the continuity of medical education in Ohio under the National Defense Program by having medical students and interns deferred from active service until completion of their medical education are making substantial progress.

A month ago the Committee on Medical Preparedness of the Ohio State Medical Association obtained from Ohio's three medical schools the names of Ohio students now enrolled and the names of prospective first-year medical students.

NAMES SENT TO COUNTIES

These names were broken down by counties. On May 6, the committee sent a communication on the question of deferment of medical students to the local preparedness committee chairmen of counties in which these medical students reside. The preparedness chairmen were requested to confer with their local draft board, or boards, on this important matter and to convince them of the necessity of deferring medical students from active military service until they have completed their medical education.

Reports from many of these chairmen reveal that their efforts have been quite successful and that most local draft boards fully realize the importance of keeping medical schools operating in order to insure an adequate supply of physicians for both the military and civilian populations. The excellent work which has been done by preparedness chairmen in most counties on this vital matter should be deeply appreciated by all who realize what a serious problem would arise if the annual supply of physicians were to be curtailed, especially at this time of national emergency.

ACTION BY SELECTIVE SERVICE

Selective Service officials also recognizing the seriousness of the situation circularized all Ohio draft boards on this subject, emphasizing the necessity for deferment of medical students and interns. (Circular No. 32.)

Based on a memorandum issued by National Selective Service Headquarters, Lt. Col. C. W. Goble, State Director of Selective Service, forwarded the following circular to all of Ohio's local draft boards under date of May 9:

MEDICAL

(a.) Occupational Deferment of Doctors, Internes and Medical Students:

(1) A report from the Office of Production Management to the Deputy Director of Selective Service conclusively demonstrates that the medical profession constitutes an activity essential to the national health, safety and interest, and that a serious interruption or delay therein is likely to impede the national defense program. The substance of this report is broken down in detail for the information of local Selective Service agencies as follows:

(b.) Medical Doctors

(1) **Supply**—At present it is estimated that there are approximately 155,000 practicing physicians in the country.

(2) **Demand**—The national defense program as now outlined will require 7,900 physicians for the Army, 900 for the Navy, 100 for the Public Health Service and 100 for the Veterans Administration, a total of 9,000 medical doctors, **in addition to present staffs.** This represents a reduction of at least 5 per cent in the number of doctors available for service in civilian life. Such a reduction imposes an added burden on physicians serving the general public. The expanding defense program greatly increases industrial hazards to workers and will increase the demand for medical care in the field of industrial medicine. The rapid growth of communities throughout the country through the establishment of new defense industries presents serious health problems, all of which means that the demand for medical services to the general public will increase as the national defense program expands, in addition to the 5 per cent withdrawal of the physicians from private life to the armed forces under the present program of the armed forces. It has been estimated that the increased demand will be approximately 10 per cent.

(3) **Shortage**—From the above it is apparent there is an over-all and increasing national shortage of medical doctors for service both to the armed forces and to the civilian population. Further, the supply is not distributed in accordance with the population so that consequently there are present shortages in some local board areas while on the other hand there are present surpluses in other local board areas. However, any such surpluses may be substantially reduced and even wiped out entirely by reason of the requirements of the armed forces and the increased civilian requirements as above indicated. As set forth in the Memorandum to all State Directors (I-42) of March 25, 1941, the War Department has stated that it is now in need of Medical Officers and desires to commission duly qualified physicians and surgeons in the Medical Corps Reserve for immediate active duty of one year. Where a medical doctor, independent of Selective Service, accepts such a commission, he is in Class I-C thus reducing the demand of the Army by one.

(4) **Policy and Procedure**—The local board has the problem of deciding whether or not an individual doctor is so necessary to a community that he should be deferred from training and service under the provisions of Paragraph 350-353 of the Regulations. This problem should be approached with a clear appreciation of the over-all national shortage. If the local board determines that he should not be deferred, it should call his attention to the provisions of the above mentioned memorandum (I-42) and encourage him to apply to the Corps Area Commander for commission in the Medical Corps Reserve. If he

has been finally classified in I-A and does not take advantage of this opportunity for commission he will be inducted when his order number is reached.

(c.) Medical Students:

(1) **Supply**—Currently there are approximately 5,000 medical graduates entering the profession each year. This represents the only source of supply for future requirements necessary to supplement the present force of the medical profession and to replace those leaving the profession. When it is realized that approximately 27,000 of the nation's physicians are 65 years of age or older, and that 3,800 are lost to the profession each year, this supply is not large.

(2) **Demand**—Experience shows that not more than 60 to 65 per cent of medical graduates are physically and otherwise qualified for military service. Consequently, there is an acute demand for physically qualified medical graduates by the Army to serve as physicians. The civilian needs require approximately 3,800 graduated medical students each year to replace the physicians who are lost to the profession through normal attrition. The demand for these replacements is identical with the demand for doctors, since they constitute the only source of supply.

(3) **Shortage**—There are no replacements for medical students who are withdrawn from school. Consequently, if the supply of medical students who are to be graduated into the medical profession is reduced through their induction to serve in a non-professional capacity, an increasing reduction of physicians available for military service as well as an aggravation of the increasing over-all national shortage will result.

(4) **Policy and Procedure—It is of paramount importance that the supply be not only maintained but encouraged to grow, and that no student or interne who gives reasonable promise of becoming an acceptable medical doctor be called to military service before attaining that status.** Local boards should remember that a deferment is not an exemption and that the obligation and liability for military service remains upon its expiration. The procedure governing deferment of medical students is that prescribed by the Memorandum to all State Directors (I-62) of April 22, 1941—(See also, Bulletin No. 10, of the American Council on Education attached thereto and Night Letter to all State Directors, April 30, 1941.)

(d.) Internes:

(1) **Supply, Demand, Shortage**—The internship is a period of hospital experience which follows the formal medical college course. It is considered an essential part of a medical education. The supply, demand and shortage of internes is identical with that set forth in c., above, with regard to Medical Students.

(2) **Policy and Procedure**—As internes are in the process of taking additional training, the same policy and procedure prescribed with respect to medical students should be followed. However, we are informed that under the present War Department policy, internes who meet Army physical standards can be commissioned in the Medical Reserve Corps, and if so commissioned, will not be called to active duty during the first year of internship. Consequently, even though a local board places an interne in Class I-A by reason of determining that he can be spared from the community, such interne may, by becoming a member of the Medical Reserve Corps, complete his first year's internship.

Additional Ohio Medical Reserve Officers Called To Active Duty

The following Ohio medical reserve officers have been ordered to active duty or had their orders revoked during the past month:

Ft. McClellan, Ala.: Capt. Wm. Henry Strathman, Toledo.

Ft. Knox, Kentucky: 1st Lt. Thomas Knowlton Preston, Springfield.

Medical Reserve Corps Officers Ordered to Active Duty by the War Department: Major Wilbur M. Bolton, Cleveland; 1st Lt. Benjamin L. Hawkins, Cincinnati; 1st Lt. Irving Maxwell Liebow, Cleveland; Major Leo Robert Markey, Cleveland; Major Clarence F. Murbach, Archbold; Capt. Timothy F. O'Connor, Ashtabula.

Orders Revoked: Previously ordered to Ft. Knox, Kentucky—1st Lt. Morris Stanford Osherwitz, Cincinnati; 1st Lt. Geo. Edgar Henderson, New Athens; 1st Lt. Isadore Irving Binzer, Toledo; 1st Lt. Albert Irving Reaven, Akron; 1st Lt. Albert Selfman, Mansfield. **Previously ordered to Ft. Bragg, N. C.**—1st Lt. Mortimer Herzberg, Jr., Cincinnati. **Previously ordered to Ft. Benjamin Harrison, Ind.**—1st Lt. William Leo Regan, Wilmington.

A.M.A. Denied New Trial

As was reported in the May issue of The Journal, the jury in the case of the U. S. Government versus the American Medical Association brought in a verdict April 4 finding the A.M.A. and the District of Columbia Medical Society guilty but all of the individual defendants not guilty. On May 2, attorneys for the A.M.A. submitted to the U. S. District Court, Washington, D. C., three motions, namely, that the verdict of guilty be set aside and a judgment entered in favor of the corporate defendants; that there be an arrest of judgment; and that a new trial be granted. According to the press, the Court on May 19 denied the motion for a new trial. It is anticipated that further procedure in the case will be considered by the Board of Trustees and the House of Delegates of the Association during the meeting in Cleveland, June 2-6.

Recent Marriages

Recent marriages of Ohio physicians include the following: Miss Mary Elizabeth Crotti, Columbus, and Dr. Maurice Buckles, Louisville, Ky.; Miss Nellie E. Spatz and Dr. Henry M. Duckwall, Dayton; Miss Anita Emmerich and Dr. Morris Hyman, Cincinnati; Miss Jeanne Kennedy and Dr. Carl D. Marsh, Springfield; Dr. Jane Kaufholz and Dr. Lawrence Kilham, Cleveland; Miss Ruth Ann Pfau, Findlay, and Dr. George A. Peabody, Brooklyn, N. Y.; Miss Martha Jane Shellhaas, Pleasant Hill, and Dr. Cecil F. Rust, Dayton; Miss Gertrude Cole, Washington, D. C., and Dr. Robert F. Slotterbeck, Toledo.

Do You Know - - -

According to the May 17 issue of The Journal of the American Medical Association, detailed information received by the A.M.A. from members of the medical profession reveals that of 56 patients who received tablets from the lots of sulfathiazole contaminated with phenobarbital, nine subsequently died.

* * *

Dr. Claude S. Perry, Columbus, has been elected to full membership in the Ohio State Chapter of Sigma Xi, in recognition of his accomplishments in the field of scientific research. At the present time Dr. Perry, a major in the Medical Corps of the U. S. Army, is on active duty as assistant chief medical officer for Selective Service in Ohio.

* * *

Dr. Howard T. Karsner, professor of pathology, Western Reserve University School of Medicine, Cleveland, lectured in Atlanta, Ga., recently under the auspices of the Atlanta Clinical Society. His subjects were: "Ovarian Tumor With Endocrine Dysfunction", "Hypertension", and "Paget's Disease of the Nipple".

* * *

More than 500 applications had been received up to May 2 in response to the recent request of the British Red Cross to the American Red Cross for 1,000 physicians to serve in Great Britain.

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During the recent meeting of the Tri-State Medical Association at Tiffin, an emergency message was relayed to one of the physicians in attendance through a broadcast by the state highway patrol radio picked up by local police.

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The Cleveland Academy of Medicine has presented its distinguished service award to Dr. John J. Thomas in recognition of his "long and faithful service to organized medicine and the community". Dr. Thomas has practiced in Cleveland since 1895. He was president of the Academy in 1914.

* * *

Beneficiaries in the will of the late Alfred L. Willson, noted Columbus philanthropist, include the Columbus Children's Hospital, which will receive $25,000 annually from the charitable foundation established by Mr. Willson.

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From November 18, 1940, to May 16, 1941, the laboratory of the State Department of Health made serological tests of 112,961 blood specimens of prospective draftees. A compilation of results on examinations of the first 100,000 men showed that 2.5 per cent had positive reactions. The percentage of positives among the white men was 1.5, and 16.9 among the Negroes.

Western Reserve University School of Medicine held an open house on the evening of May 2. Virtually all departments of the school were open for public inspection. Demonstrations and exhibits were arranged in a number of the research laboratories.

* * *

Ralph W. Jordan, secretary, and Mrs. Lucille Brick, assistant secretary of the Ohio Hospital Association, have resigned to devote their entire time as director and associate director, respectively, of the Central Hospital Service, which now has 21,210 subscribers in 22 counties in central Ohio, with 18 participating hospitals.

* * *

A bill was enacted at the recent session of the Ohio General Assembly authorizing the Miami County commissioners to hold a special election on the question of accepting a $1,250,000 bequest from the estate of the late Jacob G. Dettmer, Brooklyn, N. Y., millionaire baking powder manufacturer, to finance the construction and equipment of a Miami County hospital. Mr. Dettmer was a native of Piqua.

* * *

Dr. Marion A. Blankenhorn, head of the department of internal medicine, University of Cincinnati College of Medicine, has been on leave of absence for six weeks while conducting a series of post-graduate lectures for physicians in Honolulu. Among the topics he discussed were: "Epidemiology and Specific Treatment of Pneumonia", "Nutrition", "Hypertension", "Gastro-Enteric Bleeding", and "Medical Shock".

* * *

"What Every Expectant Father Should Know" was discussed in a series of four weekly lectures held recently in Cleveland under the sponsorship of the Child Health Association.

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Speakers at the annual meeting of the National Gastroenterological Association held at New York, May 13-16, included the following members of the faculty of the Ohio State University College of Medicine, Columbus: Dr. Charles A. Doan, Dr. Philip T. Knies, Dr. Clark P. Pritchett, Dr. George M. Curtis, Dr. Frank E. Hamilton.

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Nearly 9,000 elementary and high school pupils are attending special "sight-saving classes" in 218 communities in the United States. The National Society for the Prevention of Blindness estimates that there are 41,000 additional American children who need these special education facilities.

Member of Medical Faculty, Ohio State University, Writes About Health Conditions and People's Morale in War-Torn England

SOME interesting comments on public health conditions and the morale of the people in war-torn England are contained in a letter dated May 10, and received May 20 by Dr. Russel G. Means, Columbus, from Dr. N. Paul Hudson, professor and chairman of the Department of Bacteriology, Ohio State University College of Medicine, now on leave of absence with the International Health Division of the Rockefeller Foundation. Dr. Hudson has been in England since last fall, and is doing special research on influenza at the National Institute for Medical Research, Hempstead, London.

Excerpts from Dr. Hudson's letter follow:

ATTITUDE OF U. S. WATCHED

"Since I wrote you last, a lot of water has gone under the bridge and over the dam. The fortunes of war have ebbed and flowed, and just now affairs in some quarters hang in a precarious balance. While the actions of the United States are being watched with more than usual interest, I can detect no change in the stolid morale of the British. London and other cities of the Isles have experienced some severe bomb and incendiary attacks, but if the purpose is to shake the public's spirit, it has failed completely. With the understanding that the war is a total conflict, the individual citizen seems to think no more of giving up after a bombing than a soldier would in the trenches.

"In wars of the past, military medicine had to do, of course, chiefly with the armed forces. In this total war, medicine is concerned with casualties and health in the civilian population as well. This is the case not only among workers in industrial centers producing essential supplies, but also among the general population. Every one is becoming conscious of the importance of public health in connection with such fields as food and vitamins, infectious and communicable diseases, immunizations, sanitation, first-aid, hospital facilities, and air-raid shelters, as well as medicine of trauma, shock, blast and hemorrhage in the civilian. The situation makes arrangements for medical service extremely complicated. But officials are aware of these problems, and it is interesting to see how one question after another is tackled and dealt with as it appears, and often of course in anticipation of its appearance. Public health is having a new and more significant emphasis, and it will be interesting to see if this gain is maintained after the war.

NATION'S HEALTH GOOD

"This past year, the state of health of the nation has been surprisingly good. Acute respiratory infections have had a lower incidence than usual. Contrary to expectations, the congregation of large numbers of people in ARS's seems not to have been a determining factor in the occurrence of respiratory epidemics. Several possible explanations have come to my mind. In the first place, the proportion of the whole population of large cities (London in particular) that use public shelters is not large, according to published figures. Then many of those who do use them are from circumstances that may not be better. Coincident with this is the possibility that they are a toughened group, immunized to respiratory infections. The proportion of children in such shelters is less than in a peace-time population. And after all, this by chance may not be an epidemic year for certain types of respiratory infections.

"There have been common colds, of course, but without a significant increase in severe sequellae. An influenza epidemic has occurred during the Winter, but it has been mild and not of a sweeping nature. The incidence has been low and cases of influenza pneumonia have not been as numerous as usual. A measles epidemic, starting several months after the expected onset, has swept the country. There have been more cases of diphtheria than commonly, and a campaign is being made, with some success, to persuade the public to be immunized. Some public health programs carried on in peace-time have been modified by the conditions of war. In general, it is evident that the health of the nation is good, and that officials are constantly on the watch for its protection and improvement.

PUBLIC BEING EDUCATED

"The public, as well as the profession, is being educated in health matters. Large numbers of laymen are being trained in first-aid, since so many are concerned with the care of the civilian population in case of air-raids. Advertisements in simple language on posters and in newspapers instruct the public in matters of health, immunizations, hygiene, food and accident. Tradition has to be taken into account in some instances, but in general the results are encouraging and the acquaintance by the public with certain basic medical problems cannot help but be a permanent advantage.

"You have heard, of course, of the occasional severe raid on London. One of my friends, an American doctor, helped care for casualties at one of the hospitals during a recent raid. He confirmed what I had heard indirectly before, that doctors, nurses, civilian volunteers and members of the ambulance corps carried out their duties with efficiency, calm and order, under the most trying conditions of continued bombing, bursts, lack of light and crashing windows. He said he did not hear a word of complaint from personnel or casualties. Everyone is in the front line in this type of warfare.

"My own situation remains unchanged. I am still living here in the Institute, which is still intact, and have a bunk in the Institute's ARS. Barricaded as it is, it is almost sound-proof so that heavy gunfire hardly disturbs us. That is a big advantage, but the shelter does not keep out vibrations when bombs burst in the neighborhood.

RESEARCH ON INFLUENZA

"My work on influenza with Dr. Andrewes has continued satisfactorily. We have distributed large amounts of the influenza vaccine sent over by the Rockefeller Foundation, and carry on studies on the influenza material of the year. The strains of virus that have been isolated from patients and identified are of the "A" variety. Our laboratory work has not been interrupted for some time now, because of the absence of daylight raids. A few times earlier in the year, we had to retreat (quite orderly) to the ARS when a local alarm, sounded by our roof-spotter, warned us of planes overhead. I suppose that it is a sign of stability and resourcefulness that our supply of public utilities has not been broken here at the Institute, at least since I came in December.

"Thank you for the word about my friends who are or may be called to medical service. I presume it won't be long before we will all become involved in one way or another. To stay at home and take care of an added load is important service, as so many here are finding out. If we decided that our democratic institutions are worth having, we will have to make the effort necessary to keep them.

"We were very much interested in hearing of President Roosevelt's call for a thousand doctors for Red Cross service here. I have heard that the response was good and I wonder how many are coming and how they will get over in such large numbers. There are several ways in which they might be of service. I hope they will have patience when they come, and not expect to have a lot to do all the time. I suppose that you have heard of the plan, supported by the Rockefeller Foundation, to send a number of British medical students to the States for some or all of their clinical training. It is a good idea for several reasons and is being enthusiastically received. The choice of the men is in the hands of a British committee."

Conference on Nutrition in Defense To Be Held in Columbus, June 17-19

The Ohio Conference on Nutrition in Defense will be held at Ohio State University, Columbus, June 17, 18 and 19. The program for the conference is being arranged by a committee which includes Dr. Jonathan Forman, editor of *The Ohio State Medical Journal.* Dr. Forman was designated to represent the Ohio State Medical Association on the committee by The Council at its meeting on February 16.

This conference is planned primarily for professional people, including physicians, dentists, nurses, dietitians, high school and college teachers of foods and nutrition, extension staff members in agriculture and home economics, supervisors of the Farm Security Administration, school lunch directors, and others connected with educational, social welfare, health and other activities which deal with aspects of nutrition.

To give up-to-date nutrition facts and latest nutrition research findings, many nationally known speakers will be present. They include: Dr. C. A. Elvehjem, professor of agricultural chemistry, University of Wisconsin; Dr. Lydia Roberts, chairman, department of economics, University of Chicago, and a member of the Council on Foods of the American Medical Association; Dr. Sybil Smith, senior administrator of Experiment Station in charge of Home Economics Research, Washington, D. C.; Miss Margery Vaughn, Federal Security Agency, Washington, D. C. There will also be a number of state people participating in the program.

The status of nutrition of people with emphasis on Ohio conditions will be discussed and following this, regional groups will meet to consider how all groups in their region might work together in the solution of their public and personal nutrition problems.

There will be a registration fee of $1.00 for this three-day conference. Low cost meals and housing will be available on the Ohio State University campus. Further details on the conference may be obtained from Mrs. Faith Lanman Gorrell, director, School of Home Economics, Ohio State University, Columbus.

Professional Bureau Managers Will Meet in Columbus, June 12-13

On June 12 and 13, at the Neil House, Columbus, the Columbus Bureau of Medical Economics, will be host to the third annual convention of the National Association of Professional Bureau Managers. This meeting will bring together medical business bureau managers from many parts of the United States. The number of bureaus represented will likely be between 50 and 75.

As a result of these annual gatherings, according to S. R. Mauck, the Executive Director of the Columbus Bureau of Medical Economics, the managers of such professional business units derive much value from the opportunity to exchange ideas for improving the usefulness of such agencies to the professions they serve.

In order to be eligible to become affiliated with the national association, each manager must represent a bureau which has an official relationship to the county medical society which it serves, either by being fully controlled by the professions or by some close society supervision of its activities, if a privately-owned bureau.

The convention will consist of a two-day program of short talks and round-table discussions on subjects of common interest to those attending. At the final banquet session, Dr. Jonathan Forman, Editor of *The Ohio State Medical Journal*, will address the group on the subject "The Relationship of Medical Business Bureaus to the Profession".

The association is controlled by a Board of Trustees consisting of the following heads of their respective bureau organizations: W. H. Bartleson, Kansas City, president; J. T. Hammond, Atlanta, Ga., vice-president; R. T. Hellrung, St. Louis, secretary-treasurer; C. M. Haney, Memphis, Tenn.; Ferne McKenzie, San Antonio, Texas; Stanley Mauck, Columbus; John Post, Washington, D. C.; Charles E. Smith, Peoria, Ill.; and E. M. Sprunger, Canton, Ohio.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Public Expects Action by Profession To Make H.B. 51 Effective

By now, all Ohio knows that it soon will have an enabling act for medical service plans. While House Bill 51, which becomes a law on August 5, was weathering legislative storms, Ohio's newspapers printed more than 1000 articles about it, and Ohio's radio stations broadcast 26 educational programs on it. Medical societies and their auxiliaries distributed 70,000 explanatory leaflets, and their members gave more than 100 talks discussing it.

In the offices of the State Association are two pounds of newspaper clippings about the enabling act. Laid end to end, these would cover an average city block, or they would fill a 40-page newspaper.

Granted that these figures have little or no intrinsic significance, they would, however, convince even the most skeptical that the enabling act and its sponsors are in the public eye. More than that, some pretty definite opinions have been formed about this bill and its consequences. Consider what a few of Ohio's newspapers have said about it:

"The approval of this bill is seen as a step forward toward the goal of insuring adequate medical care to all people. . ."—*Columbus Dispatch.*

"This will make proper medical care available to thousands who might otherwise try to get along without it until too late."—*Cleveland Plain Dealer.*

"Private medicine should be given a chance to preserve its freedom. Group medicine should be turned over to private practice to determine its worth. If it should fail, then public medicine may step into the picture."—*Toledo Times.*

"Organized medicine is evidently going to play a more active part this year in the new approaches to better medical care for low-income groups."—*Youngstown Vindicator.*

"By taking this progressive action Ohio doctors have shown that they are not content to have medical practice stand still while the world moves forward."—*Dayton Herald.*

"The Mahoney bill (House Bill 51) . . . appears to be a sound measure for providing medical services for persons in lower income brackets without resorting to a type of dangerous medical socialization which such measures frequently call for."—*Cincinnati Enquirer.*

"The present plan, brought forward with the approval of the doctors of the state, is a step in the right direction."—*Cleveland Press.*

"This is sound legislation which should bring a wider distribution of medical care to that considerable section of our population which is above the level of relief and charity and yet which finds an unanticipated medical bill a serious burden upon the family income."—*Columbus Citizen.*

After reading these editorial statements, can there be any doubt that the medical profession now has the ball? Can there be any question about the public sentiment which looks to the physicians of Ohio to carry on now that the first big obstacle has been passed? Can it be denied that it is up to the doctors to make an honest and sincere effort to establish medical care plans on a workable basis?

Indeed, the profession in Ohio now has a cogent responsibility to make the best of this permission which has been granted by the legislature. There can be no undue delay in setting the groundwork for medical care plans where they are needed. Assuredly, too, there must be no ill-advised haste, no step taken without caution and consideration.

The wise academy or society in a community where a medical care plan is needed will follow a compromise pattern. It will lose no time in beginning its examination of the problem, but, on the other hand, it will strive to avoid hasty action, premature publicity, and conclusions based on insufficient data.

It is only in an atmosphere of freedom that the lamp of science and learning can be kept alight.—Raymond B. Fosdick, Rockefeller Institute.

Profession Must Be Ready for Problems of Post-War Period

More exciting news events in recent months have obscured efforts by some groups to get Congress to enact the so-called Schwert bill for the federal subsidization of physical education, recreation, and "guidance in healthful living," at a cost eventually of $200,000,000 annually.

As the measure was originally introduced—H.R. 10606 in the 76th Congress—it included health education among its goals, but in the present bill—H.R. 1074—specific reference to health education has been eliminated. Regardless of that technicality, the objectives of its supporters are probably pretty much the same as they were in the first place.

In the fever heat in Washington provoked by the country's rapid approach to participation in war, this bill may be sidetracked, but, be that as it may, the significant thing is that this is something in the wind. In the era of reconstruction after the shooting stops, something of this sort will be advanced.

That being the case, there are some important questions for physicians to be thinking about. To what extent is the medical profession going to insist on having a voice in health education? Is health education, under the aegis of a federal subsidy, likely to lead to some broader health program which would be unacceptable? If health education in the public schools is expanded through some such subsidy, should the medical profession insist that teaching materials are sound and teachers qualified? If so, is the profession ready to cooperate with educators to work out standards and curricula? These are matters which warrant attention.

To win public admiration for our scientific skills is not enough; we must also win respect as citizens. If we ignore the welfare and cultural activities of the community, we brand ourselves as civically irresponsible medical mechanics.—Journal of the Medical Society of New Jersey.

Advice on Nutrition Must Come From the Right Source

One of the lesser keynotes of the times, harmonized and synchronized with the dominant keynote of national defense, is the popular interest in adequate nutrition. Almost overnight the American people have been seized by the notion that it is essential to the defense of liberty to be well fed . . . and justifiably so. There is enough scientific foundation for the enthusiastic interest this time to distinguish it from the previous food fads which Americans have endured and survived: 18-day diets, "fletcherizing," Graham bread, and the others.

Moreover, the present popular demand for nutrition has an official stamp. First we learned from correspondents abroad that the British government had taken a hand in the situation and had decreed that vitamins should be added to the English worker's foodstuffs to keep his productive efficiency up and his health good. Next, with a blinding flash of publicity, came the announcement that the bakers of the United States were cooperating with the defense program by making bread with "enriched flour" to help American workers avoid lowered productivity through avitaminoses and other minor deficiency states. This was done at the behest of the National Nutrition Advisory Council, one of the coordinated defense agencies.

Besides all this the public has learned through its newspapers that physicians, dentists, and other interested groups are holding nutrition meetings to study ways and means of improving diets during the emergency period.

When you add to these sound and acceptable movements the inevitable ballyhoo by the manufactures of proprietary products who have jumped on the nutrition-for-defense bandwagon, is there any wonder that the public's concern about what it eats has reached a higher pitch than ever before?

Naturally there comes the question: Will this nutrition boom get out of hand? Will the pendulum cover such a wide arc that on its backswing it will go too far? Will fad and quackery supersede common sense?

The answer to these questions will be "No!" if the medical profession accepts its responsibility in this connection. As health advisors to the nation, the physicians of America must help their patients to acquire sound and sensible information about nutrition. Diet is admittedly a vital factor in good health, and many things are known about it today which were unheard of a generation or even a decade ago. The public—i.e., laymen—is entitled to the facts about nutrition in relation to health. Let's see that those facts come from the right source!

Every malpractice action undermines the confidence of the public in all physicians, and it is said that a dozen new suits are commenced based upon the publicity of a new case. You are your brother's keeper in maintaining a justified public confidence. Let no improper act of yours lead to a betrayal of that trust.—Wisconsin Medical Journal.

Use of Proper Words By Physician-Speaker Is Most Essential

Many physicians who talk to the public find it difficult to keep their phraseology at the layman's level. Unconsciously they use words which are commonplace to them but incomprehensible jargon to the non-medical man. An expert in radio education was recently asked to criticize the scripts used by physicians in a series of radio health talks. Among the hundreds of too-technical words he found the following: cardio-vascular, metabolic disturbance, polycythemia, thrombosis, thrombo-sclerosis obliterans, anastomosis, naphthokinoes, pyrodoxin, avitaminosis, anorexia, naso-pharynx, hypertrophied, keloids, pustules, sebacious glands, and many others.

"From this talk," the critic said, "the public learns little and the doctors still less. It doesn't sell health; it sells dictionaries. It doesn't educate; it confuses."

Translating scientific terms into the everyday vocabulary of the man in the street is truly an art. But it is an art which must be cultivated by the physician who sincerely intends to discharge his responsibility as a health educator. The medical profession is conceded to be the best source of health education, but its vast repository of information cannot be unlocked for the layman until he and the physician get on common ground conversationally.

To this end the Bureau of Public Education maintains an extremely helpful facility. In its subject file there is literature for the layman on approximately 100 health and medical subjects. Although this material has been assembled primarily for public distribution on a loan packet basis, many physicians take advantage of it. There is, of course, nothing scientific in these files which is not already known to the graduate of a good medical school, so the physician does not use them as a source of scientific information. Rather he employs this material to gain the layman's point of view and to anticipate the questions raised by the non-medical mind.

This is a facility which should be more widely used by the medical profession in Ohio. Few physicians are not at some time asked to speak or write for the public. When the invitation does come, you can count on the Bureau of Public Education for this kind of help in preparation.

A public opinion that can express itself only in sermons is not likely to restrain the aggressive propensities of any powerful state.—Robert H. Jackson, U. S. Attorney General.

New, but Effective Way of Charting Mortality Trends

In Columbus a Mr. Charles Velten has his own way of charting mortality trends. He tallied the birth and death dates on 68 tombstones in an old cemetery and found that the average age of the persons buried there—Ohioans of the early 19th century—was 28 years at death. By way of contrast, he did the same for a group of contemporary deaths as reported in the obituary column of the Columbus Dispatch and got an average of 53.8 years.

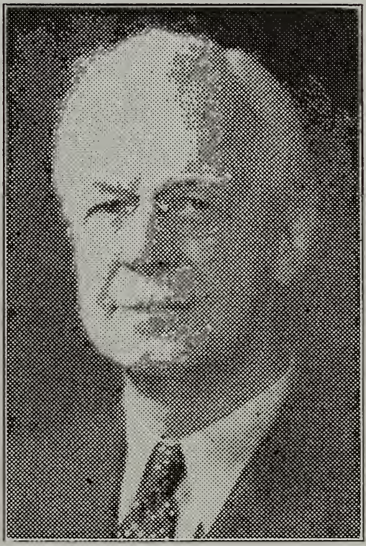
Vital statistics experts will no doubt wink at this somewhat haphazard way of showing the increase in life expectancy, but we think that, for all practical purposes, Mr. Velten's method is almost as convincing as a mess of plotted curves and logarithms—and a whole lot more picturesque. But it all points to the same conclusion: People today live about twice as long as their great-grandfathers did, thanks to advances in medical science.

The organized medical profession has suffered more from poor publicity than from any other single factor.—The New York Medical Week.

Dr. Upham, Who Will Retire as Dean This Year, To Be Honored at Dinner on June 6 at Neil House, Columbus

The Faculty of Ohio State University, College of Medicine, is giving a dinner at the Neil House, Columbus, Friday evening, June 6, honoring Dr. J. H. J. Upham who will retire this year as Dean of the College of Medicine, due to the automatic retirement age rule at the University.

Dr. Upham has been a member of the teaching faculty at Ohio State University since 1897. In 1908 he was elevated to the rank of professor of medicine, in which capacity he served until appointed dean in 1927.



J. H. J. UPHAM, M.D.

Arrangements for the banquet are in charge of a committee consisting of Dr. Russel G. Means, chairman; Dr. H. M. Platter, Dr. L. L. Bigelow, Dr. S. A. Hatfield and Dr. R. C. Baker.

Eighth District Meeting at Rocky Glen on Thursday, June 19

The annual Summer meeting of the Eighth Councilor District of the Ohio State Medical Association will be held at McConnelsville, Thursday, June 19, with Dr. Louis Mark and the Rocky Glen Sanatorium as hosts. Speakers on the scientific program will be Dr. Claude S. Beck, professor of neurosurgery, Western Reserve University School of Medicine, who will discuss "Heart Diseases Treated by Surgical Methods," and Dr. Leon Schiff, associate professor of medicine, University of Cincinnati College of Medicine, who will talk on "Hematemesis and Melena—Newer Concepts". Details of the program and reservation cards will be mailed to all members in the Eighth District.

Technique for Selective Service Group Examinations

By LT. COL. H. E. BOUCHER, M.C., and MAJ. CLAUDE S. PERRY, M.C.,
Medical Division, Ohio Selective Service Headquarters

Editor's Note:

Some practical suggestions relative to the conduct of physical examinations on a group basis will be found in the accompanying article written by Col. Boucher and Maj. Perry, chief and assistant medical officers, respectively, of State Selective Service Headquarters, based on their observations and data regarding mass examinations being given in some centers by selective service board examiners. The suggestions are adaptable to group examinations for any substantial group of patients.

THE group method of giving physical examinations to registrants under the Selective Service Act has become increasingly popular throughout Ohio. At present the group method is being used in many communities, especially the larger centers, by selective service board physicians under plans worked out cooperatively by the selective service boards and the preparedness committee of the local medical societies.

A typical county where the mass examinations are being conducted efficiently and in a highly organized manner is Mahoning County. There six groups of examining physicians have been organized to cover the area. Each group functions once every six weeks. A schedule covering the entire year has been drafted and is being followed.

The same, or similar, plans are being followed in many other areas, both large and small, and there are indications that the group method may be utilized to some degree in all communities during the ensuing months.

Experience has shown that there are certain fundamentals which must be followed to make group examinations successful. Based on our own observations and on information received at State Selective Service Headquarters, we have compiled some suggestions and a sample diagram of space needed for group examinations, which may be helpful to those desiring to adopt this plan for handling selective service registrants or other groups being given physical examinations.

Organization—A group examination, to be successful requires a sufficient number of examining physicians and a group that is well organized. In other words some one of the group should be made the chairman or director of the group. Previous to the examination each of the participating examiners should have a definite assignment or part of the examination which he is to do. This assignment, wherever possible, should be made according to specialist qualification of the examiners. For example, the ear, eye, nose, and throat specialist, if one is available, should have that part of the examination, the dentists should be given the mouth and teeth, etc. The group, if possible, should consist of a minimum of six physicians and a dentist. It is better to have several more physicians if possible although part of the work may be done by a laboratory technician if such is available.

Preparing for Examination—Duties of the clerk of the board. The clerk of the board should have previously notified all registrants as to the time and place of the examination. It is best to order them in at a definite hour in cases of larger numbers. In other words in examining a group of 60 beginning at 9:00 o'clock, 15 or 20 may be ordered to appear at 9:00, 15 to 20 at 9:30, 15 to 20 at 10:00, etc. He should also have prepared previous to the date of examination, Forms No. 200 in duplicate with name, address, order number, etc. He should have previously typewritten a blood report form for each man to be examined, complete except for the signature of the physician, and also have sufficient blood containers to cover the group. The clerk and one or more of the examining physicians should be at the place of examination some time in advance of the hour set to see that everything is ready to function.

The clerk or one of the physicians should occupy the first table and secure the completion of the statement of the person examined and his signature. This having been done the actual examination now may be started.

A recommended method is to have the blood drawn and the urine specimen taken at the first station. With a technician operating or a doctor covering the laboratory work the test for sugar and albumin may be completed and entered on the record while the blood is being taken. If not, the name and order number of the man will have to be carefully attached to each specimen.

It is generally found most satisfactory to use a work sheet to cover the examination, either an especially prepared work sheet or an extra page No. 2 of Form No. 200. By this means in all conditions which are normal a check mark may be used when the examination has been made and no comment is needed. In cases of an abnormality, such abnormalities should be written on the work sheet. At the second station should be the dentist who will examine the teeth and mouth and make necessary entries on the work sheet.

Stripped Examination—Following this the registrant should remove clothing for the remainder of the examination. Clothing should be placed together on a chair or bench to be picked up on completion of examination. Following the dentist it is well to take the blood pressure and examine the heart and chest. Blood pressure should be taken before patient is subjected to any active muscular effort.

After the man has passed all of the stations set up for the examination he should, before being released pass by a check table covered by one of the physicians responsible for classification. At this table the work sheet is checked for completion. If there appear disqualifying defects the examining physicians should recheck for accuracy and enter a tentative classification pending the result of laboratory work and blood examination. In case of the presence of sugar or albumin it is recommended that the man be directed to appear again at the office of one of the examining physicians for a second checkup as to persistence of sugar or albumin.

In case of doubt on any particular man he may be set aside for a conference of several physicians for a more careful check at the end of the period. The work sheet and paper should not be in the possession of the man during the examination but should be passed from one station to the next by the doctors or other attendants. This to avoid any possible changes or entries by the man being examined.

Keeping the Records—If a stenographer is available upon completion of the examination and check of work sheet this may be given to him or her for typing original and duplicate. The work sheet should be kept with the Forms No. 200 until final classification is made and checked as to correct transcription and spelling. This type of examination is equally applicable to one or a number of boards working together. In most cases where large groups are examined additional physicians have been invited to assist in case there are insufficient officially appointed physicians. During the process of the examination the chairman of the group may circulate and assist here and there should a bottleneck develop or assign a physician to a station which is slowing up the examination. It is well for at least one of the examining physicians to be given the responsibility of determining the mental or nervous status of men being examined to eliminate if possible the mentally insufficient and the nervous instability cases. If 4-F disqualification is noted anywhere in the line, the man may be sent to the last station (final check table) without further examination.

Equipment—A check as to the equipment and materials required should be made in sufficient time previous to the examination to be certain that everything needed is on hand. Where larger groups are examined it is wise to have one to two dozen syringes and needles so that a supply sterilized is always available.

Requisitions for medical supplies should be made by the clerk of one of the boards concerned at least a week or more in advance to insure delivery indicating that the supplies are for a group examination on such and such a given date.

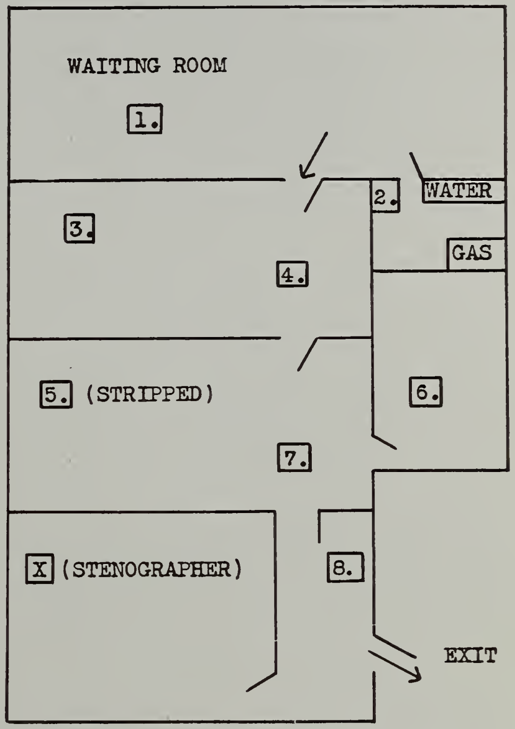


Diagram for Group Examinations

1. Clerk. 2. Urine-Blood. 3. Dentist. 4. Eye, ear, nose and throat. 5. Weight and measure. 6. Heart and chest. 7. General—joints, abdomen, feet, reflexes, rectal, hernia, etc. 8. Final check as to completion, defects, tentative classification. X. Stenographer. A similar plan may be worked out for one or more large rooms, spacing the various stations in most convenient manner.

Paper towels are available but it is impossible to furnish sterile towels so it is suggested that a few such be supplied by one of the examining physicians if possible. A pan in which water has been boiled may be used in lieu of sterile towels.

The following named articles and reagents are essential for the examination; scales, tape measure, tongue depressors—wood, nasal speculum, ear speculum, sterilizer—Bunsen burner or alcohol lamp, Benedict Solution, Acetic Acid, test tubes, towels, paper, paper cups—or wide mouth bottles, tourniquet (rubber tube), hypodermic syringe and needles, cotton, blood pressure apparatus, stethoscope, headmirror or flashlight, eye chart.

Problems of Child Health Discussed at Conference Held in Columbus at Call of Governor; Association Represented

PROBLEMS of child health in America at the present time were given careful consideration by the health section of the Governor's Committee on the Follow-Up of the White House Conference in Ohio when that group held its first meetings April 2-3 in Columbus. Several hundred persons, invited to participate by Governor John W. Bricker, attended the two-day sessions for the purpose of examining and discussing the problems of children in a democracy, particularly in time of crisis. The conference was divided into sections on health, welfare, and education.

Meeting all afternoon April 2, the 40 members of the health section discussed maternal and infant care, health of pre-school and school-age children, health of children in relation to the family, nutrition, mental hygiene of children, and similar problems. The report of this section's proceedings was submitted to the general conference the following day for consideration and follow-up. At a later meeting of the Governor's Committee, scheduled to be held in Akron in October, the recommendations of this and the other sections will be reconsidered with a view toward putting them into action. Meanwhile, educational publicity and other committee activities will further the program of the organization.

DR. WILZBACH CHAIRMAN

The health section was under the chairmanship of Dr. Carl A. Wilzbach, Cincinnati health commissioner and chairman of the Sub-Committee on Health Education of the Ohio State Medical Association. Official representative of the State Association was Dr. Harve Clodfelter, of Columbus. Mr. Richard Aszling, Director of the Bureau of Public Education, was present at the sessions. Among physicians in attendance were Dr. Sterling H. Ashmun, of Dayton, state chairman of the American Academy of Pediatrics and a member of the Committee on Education, Ohio State Medical Association; Dr. Russel G. Means, of Columbus, chairman of the Ohio Public Health Council; Dr. G. F. Moench, health commissioner of Delaware and Union counties; Dr. Dorothy Donley, of Columbus, who presented a discussion on mental hygiene and children; Dr. Richard A. Bolt, director of the Cleveland Child Health Association; and Dr. Arthur H. Spreen, of Cincinnati, who presented a discussion of health of pre-school and school-age children.

REPORT OF SECTION

Following are some of the highlights from the report submitted by the health section:

"Every expectant mother should have competent medical and nursing care and should be encouraged to seek medical care early in pregnancy. There should be adequate medical and nursing care available to every infant. As prematurity is now generally the leading cause of death under one month of age, we recommend that a thorough study by each locality be made of their own premature infant deaths which may indicate steps to be taken in its prevention. We recommend the vigorous support of the prenatal blood test and of the pre-marital blood test bills now before the state legislature."

"There should be a well rounded program of medical, nursing, and dental care for children from birth through school age. These services are particularly inadequate now in small city and rural areas. There should be proper education of school children and parents in health measures and hygiene in school and home. Healthy teachers and school employes are essential to the health of the children. Are we sufficiently aware of the dangers of teachers with communicable diseases?

"These should be given a great deal of consideration: healthful physical conditions in schools, facilities for recreation, periodic dental examination and correction, periodic tests of vision and hearing, early detection and control of communicable diseases, daily school lunches in areas where needed, and immunization when necessary.

"Accidents are a prominent cause of death among children, and steps should be taken by health agencies to align themselves with other community groups for effective accident prevention. At one age level (the runabout age) the greatest cause of deaths is accidents.

DENTAL PROBLEM

"In many parts of the state 90 per cent of the children have dental caries. The greatest lack in our public health program is dental service. This is a problem that demands the special attention of public health leaders and the dental profession.

"The health and well-being of children depend to a large extent upon the health of all members of their families. Preventive and curative health service and medical care should be made available to the entire population, rural and urban, in all parts of Ohio.

"The primary concern is nutrition for health. Needs in this field are: to secure reliable information on nutrition, to make available this knowledge to the public, and to assist the public in securing suitable foods for its use.

MENTAL HYGIENE

"Mental hygiene should begin in childhood. It should include instruction to parents in the understanding and handling of children. School systems should have available psychiatric consultation for both pupils and teachers. It is recommended that all school failures in grades 1 to 3 should be investigated for possible mental factors involved.

"Coordination of all health groups is essential for effective results. In the state-local field there should be created a council made up of representatives of the three departments of state government—health, welfare, and education—and of representatives of health departments and private health agencies, including clinics and hospitals, the medical, dental, and nursing professions, social workers, nutritionists, parents, and teachers.

Coming Meetings

American Medical Association, Cleveland, June 2-6.

House of Delegates, Ohio State Medical Association, Cleveland, June 3-4.

American Association for the Study of Allergy, Cleveland, June 2-3.

American Association for Thoracic Surgery, Toronto, June 9-11.

American Association of Medical Milk Commissions, Cleveland, June 1-2.

American Association on Mental Deficiency, Salt Lake City, June 20-24.

American Broncho - Esophagological Association, Cleveland, June 3.

American College of Chest Physicians, Cleveland, May 31-June 2.

American College of Physical Therapy, Washington, D. C., Sept. 1-5.

American Medical Women's Association, Cleveland, June 1-3.

American Neurological Association, Atlantic City, June 9-11.

American Orthopedic Association, Toronto, June 9-11.

American Proctologic Society, Cleveland, June 1-3.

American Radium Society, Cleveland, June 2-3.

American Rheumatism Association, Cleveland, June 2.

American Roentgen Ray Society, Cincinnati, Sept. 23-26.

Association for Research in Ophthalmology, Cleveland, June 3.

Meeting for Examining Physicians, State Selective Service System

Meeting of Examining Physicians, Selective Service System, of Ohio will be held in the Ballroom, Hotel Cleveland, Cleveland, Ohio, June 5, at 4:00 P.M.

Lt. Col. H. E. Boucher, State Medical Officer, Selective Service for Ohio, will preside. The speakers at the meeting will be: Col. E. C. Jones, MC., Medical Supervisor of Induction Boards, Fifth Corps Area; Col. S. J. Randall, Dental Corps, Fifth Corps Area Dental Officer; and Major Robert A. Bier, MC., Washington, D. C., Secretary of Medical Advisory Council, and Liaison Officer between the Council and National Headquarters, Selective Service System.

Col. Jones will discuss the problems as presented to the Induction Boards, Col. Randall will discuss the interpretation and regulations covering dental requirements, and Major Bier will speak on special problems involving examinations as seen from the standpoint of National Headquarters. A question-and-answer period will follow the addresses.

All examining physicians and physicians interested in problems connected with Selective Service are invited to attend this meeting.

Second Councilor District Meeting

The problem of establishing medical service corporations under the new Ohio enabling act was given thorough consideration when about 50 officers and leaders of medical societies in the Second Councilor District met in Dayton, May 14, Following a dinner at the Engineers Club, Mr. J. D. Laux, executive director of Michigan Medical Service, Inc., outlined the experience in that state, and Dr. William M. Skipp, of Youngstown, President of the Ohio State Medical Association, recounted the story of the passage of the enabling act.

Officers of the district group, elected at the Dayton meeting, are: Dr. C. I. Stephen, Ansonia, president; Dr. Harry R. Huston, Dayton, secretary; and Dr. H. C. Hanning, Dayton, treasurer. Dr. D. W. Hogue, Springfield, Second District Councilor, introduced the speakers, and Dr. H. C. Messenger, of Xenia, retiring president, presided.

Findlay—June 23 will mark the 50th anniversary of the founding of Findlay Hospital. Dr. J. C. Tritch, still in practice, was a member of the original Board of Trustees.

Health Conditions In Nation Remain Favorable, According To Latest Report Made by Surgeon General Parran

"HEALTH conditions remained generally favorable throughout the nation during 1939 and the infant mortality rate was the lowest on record," Surgeon General Thomas Parran of the United States Public Health Service stated in his annual report for the fiscal year 1940, recently released.

World conditions were not conducive to good reporting of quarantinable diseases during the calendar year 1939, so incidence of disease recorded can do no more than indicate the trends, Dr. Parran reported.

The reported world prevalence and mortality of smallpox in 1939 was 164,771 cases and 33,026 deaths as compared to 124,269 cases and 26,148 deaths in 1938. The 129,615 cases and 30,134 deaths in India alone exceeded world totals for 1938. A decline was registered in the United States, with 9,877 cases of smallpox in 1939, as compared to 14,939 in 1938. Cholera was confined principally to India, China, Iran, and Afghanistan. India reported 139,293 cases and 70,109 deaths, as compared to 356,373 cases and 174,213 deaths for 1938.

The usual widespread prevalence of typhus fever was in evidence. Available information shows a total of 27,772 cases as compared to 27,326 in 1938. The countries reporting the greatest number of cases were, in the order named, Tunisia, Egypt, Poland, the United States, and Algeria.

DEATH RATE IN U.S.

The provisional death rate in the United States for 1939, as reported by the United States Census Bureau, was 10.7 per 1,000 estimated population.

The information here presented on mortality rates by cause of death is based upon prelimmary data for 1939 collected from 45 states, the District of Columbia, Hawaii, and Alaska. Data from these sources indicate that the general death rate for 1939 will differ only slightly from that of 1938, if at all. The provisional reports of the Bureau of the Census show a total of 1,387,797 deaths in 1939 as compared to 1,381,391 in 1938.

The mortality rates from the following diseases were the lowest reported during the past five years: Typhoid and paratyphoid fever, measles, scarlet fever, diphtheria, encephalitis, meningitis, tuberculosis, malaria, pellagra, pneumonia, digestive diseases, diarrhea and enteritis (under two years), nephritis, and accidents, including automobile accidents.

The death rate from pneumonia was unusually low in 1939, due to the more extensive use of diagnostic techniques and of new methods of treatment.

Mortality from each of the four principal communicable diseases of childhood—measles, whooping cough, scarlet fever, and diphtheria—decreased appreciably for 1939. The death rate from diphtheria has declined nearly 50 per cent during the past five years.

The principal diseases for which higher mortality rates were reported in 1939 than in 1938 are: Influenza, cancer, diabetes, cerebral hemorrhage, and heart disease.

"Cancer, diabetes, cerebral hemorrhage, and heart disease, are primarily disorders of middle adult life and old age and the increase in deaths from these causes is largely due to the aging of the population," Dr. Parran stated. The rise in each instance, except in diabetes, was less than 4 per cent over the rate for 1938.

FEWER INFANT DEATHS

"The provisional infant mortality rate of 47 per 1,000 live births was the lowest on record and represents a decline of 15 per cent during the past five years. Only five states reported higher rates in 1939 than in 1938.

"After a temporary increase in 1937 and 1938, the birth rate declined about 2 per cent during 1939. Twenty-eight of the 46 states reported decreases. The crude rate of natural increase of 6.6 per 1,000 population in 1939 was slightly less than that recorded in 1938, namely, 7.0 per 1,000," Dr. Parran said.

DRUGS BEING STORED

The general world situation and the national defense program in this country involving demands for strategic drugs imported for the most part, of which opium and quinine are the most important, have resulted in storing large quantities of opium and antimalarial drugs. For the first few months of the calendar year 1940, with the cooperation of the commercial importers, reserve stocks of opium have been built up to meet a three-year demand. Through similar cooperation, large supplies of cinchona bark have been imported. In addition, the Joint Army-Navy Munitions Board, following a recommendation by the Public Health Service, purchased a considerable supply of quinine sulfate.

The National Institute of Health undertook studies of problems associated with high altitude flying and rapid compression at the request of the Navy Department. The Institute also advised with the Army and Navy authorities concerning standard immunization procedures for the military forces. Large supplies of yellow-fever vaccine have been manufactured.

Active cooperation was given to the Army in protecting the health of troops during the Spring and Summer maneuvers. Efforts were directed toward the active control of venereal disease infection, the sanitation of food establishments, protection of milk and water supplies, and control of communicable diseases.

COOPERATION WITH STATES

Cooperative health activities with the states continued both in venereal disease control and general health services. Research continued under the National Cancer Act in various phases of the complicated cancer problem, with increasing cooperation of many scientific institutions in the country.

Dr. Parran pointed out that an important function of the Public Health Service is the administration of the cooperative health programs under the Social Security Act and the Venereal Disease Act, including the provision of technical and advisory service to state health agencies.

Since the social security program became effective, a total of $36,833,000 has been appropriated for grants-in-aid to the states. During this fiscal year, additional impetus was given to the cooperative health program by the amendments of 1939 to the act, which increased the amount authorized for grants-in-aid to the states under title IV from $8,000,000 to $11,000,000 annually. Under this authorization, an additional $1,500,000 became available to the states, bringing the total appropriations for 1939-1940 to $9,500,000. These additional funds were utilized principally in strengthening or establishing special programs for pneumonia, tuberculosis, cancer, malaria, dental hygiene, and industrial hygiene, according to the report.

The total amount of money available from all sources in those health jurisdictions where Federal funds were budgeted was $83,790,782 for the fiscal year 1940. This represents an increase of $32,714,421 over similar tabulations for last year.

The national defense program will bring about concentration of population in military and industrial areas. The Public Health Service has developed basic health organizations in most of these areas to safeguard the public health.

VENEREAL DISEASE PROGRAMS

"After two years of work under the Venereal Disease Control Act, the number of syphilis cases reported seems to have reached or passed the peak. In areas where syphilis has been attacked vigorously it has begun to recede. This indicates that the large reservoir of untreated cases has been substantially reduced," Dr. Parran said.

Progress in the problem of case holding is indicated by the fact that the proportion of individuals who remain under treatment until they have received the minimum required therapy has been increased from 15 per cent to 58 per cent.

Existing diagnostic and treatment facilities have been expanded from 1,750 clinics and dispensaries for the treatment of venereal diseases as of July 1, 1938, to 2,900 as of July 1, 1940.

Surgeon General Parran recommends: (1) that the national syphilis control program be carried through energetically; (2) that, with the development of the newer methods for attacking gonorrhea, major emphasis be placed on applying this knowledge to the control of gonorrhea en masse; and (3), above all, that every effort be made to speed up the mass control of both diseases, particularly in military and industrial defense areas.

RESEARCH ACTIVITIES

Research in the National Institute of Health has been stimulated by the completion of the laboratory buildings near Bethesda, Md., and at Hamilton, Mont. Studies on nutrition have been increased because the nutritional status of the population is directly related to its health and vitality. Improvements in diagnostic methods made during the year indicate that it may be possible soon to formulate a system of physiological, chemical, and functional tests of nutritional status which may be applied on a broad public-health scale.

In chemotherapy studies, three series of new active compounds entirely different from sulfanilamide were obtained. These are derivatives of arsenic, phosphorus, and nitrobenzoic acid, many of which have not been described heretofore.

The present demands of national defense find the Public Health Service and cooperating agencies in a better position than ever before to cope with the health problems of a rapidly expanding industrial program. Efforts of the past four years to develop industrial hygiene units in various state and local health departments have borne fruit. Today, some 40 units are in operation in 29 states, nine cities and two territories. The personnel of these units are actively developing programs of practical control of health hazards in industry, and are coordinating industrial hygiene services with other phases of the state and local public health programs.

MENTAL HYGIENE PROBLEMS

The Mental Hygiene Division of the Public Health Service extended medical, psychiatric and other technical services to include units at three additional Federal penal and correctional institutions.

"Mental and nervous diseases and epilepsy together represent the largest unsolved problem in medicine," Dr. Parran stated. Hospitals caring for mental disease have on their books 513,858 patients, and 119,787 additional patients are cared for in hospitals for mental defectives and epileptics. Since St. Elizabeth Hospital, Washington, D.C., has been recently transferred to the Public Health Service, consideration is being given to the establishment of an institute at St. Elizabeth for the study of mental and nervous diseases.

During the third year of operation of the National Cancer Institute, grants-in-aid totaling $61,380 were approved by the National Advisory Cancer Council for research projects at 13 institutions. Twenty-three research fellows were on duty during the year and 31 physicians were in training for special work in the diagnosis and treatment of cancer. Loans of radium for use in the study and treatment of cancer were made to 47 hospitals in 24 states and in Hawaii. During the year seven states were added to the number having cancer-control programs, bringing the total tax-supported state cancer-control programs to 17. Seven states with previously inaugurated programs expanded activities during the year.

Alumni Reunion, College of Medicine, University of Cincinnati

Dr. Mabel E. Gardner, president, has announced completion of plans for the 1941 reunion of the Alumni Association of the College of Medicine, University of Cincinnati for Saturday, June 7.

Hospital and clinic demonstrations will be conducted during the day.

The Annual Banquet will be held in the evening at the Sinton Hotel. The principal speaker will be Dr. Clay Ray Murray, assistant professor of surgery, Columbia University.

Dr. Stanley Dorst, dean of the College of Medicine, will present 75 members of the 1941 graduating class for membership in the Alumni Association.

Following the Banquet there will be a reception and dance in honor of the graduating class. Graduates everywhere and their friends are invited. Reservations should be made at the Alumni Office at the University of Cincinnati or at the College of Medicine.

Open New Offices

Ohio physicians who have recently opened new offices include the following: Dr. George T. Booth, Toledo; Dr. John Halley, Dover; Dr. Arthur Watkins, Cleveland; Dr. Grover S. Brzozowski, West Manchester; Dr. F. C. Yeager, Dover; Dr. K. T. Edmonds, West Alexandria; Dr. Thomas R. Shoupe, Findlay; Dr. William W. Corwin, Galion; Dr. P. C. McDowell, Wooster; Dr. Edward Heyde, Wooster; Dr. Louis J. Zupp, Ravenna.

In Memoriam

Horatio F. Chisholm, M.D., Cleveland; Chattanooga Medical College, 1894; aged 80; died March 8. A native of Scotland, Dr. Chisholm graduated at the University of Edinburgh in 1882 and later studied at the Royal College of Physicians and Surgeons. He served eight years in the Royal Army Medical Corps, spending two and one-half years in Egypt and five years in India. Dr. Chisholm came to the United States in 1892 and, after another year in medicine, began practice in Florida. From 1904 to 1914 he practiced in Marion, and at the outbreak of the last World War he was commissioned a major in the Royal Army Medical Corps, and returned to Europe for active duty. From 1922 to 1931 Dr. Chisholm was British vice-consul at Cleveland. A daughter survives.

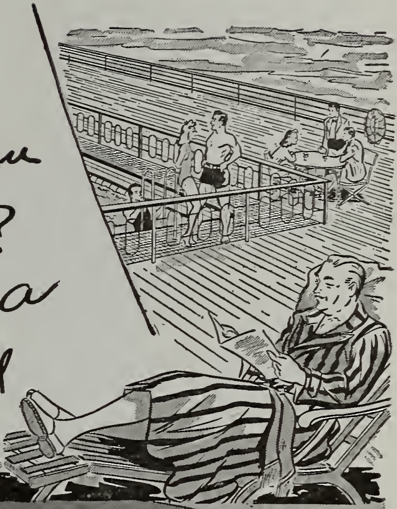
James Clarence Cowan, M.D., Fort Wayne, Ind.; Chicago College of Medicine and Surgery; aged 64; former member of the Ohio State Medical Association; member of Indiana State Medical Association and the American Medical Association; died March 16. Dr. Cowan began practice at Monroeville, Ind., and Dixon, Ohio, in 1904, and had been practicing in New Haven and Fort Wayne for 36 years. He was a member of the Van Wert County Medical Society from 1912 to 1920. Surviving are his widow, a son, four daughters, three brothers and two sisters.

Fred Ernest Davis, M.D., Alvordton; Toledo Medical College, 1904; aged 71; died April 14. Dr. Davis practiced in Alvordton for nearly 30 years. He was a former mayor of the village and a member of the Masonic Order. His widow and a daughter survive.

George Whitney Hine, M.D., Berlin Heights; Western Reserve University School of Medicine, 1888; aged 83; died April 26. Dr. Hine practiced in Berlin Heights for 53 years. Prominent in the affairs of this Erie County community, he was a member of the Masonic Order and the Knights of Pythias. Surviving are his widow and a son.

Karl Mantey, M.D., Eustis, Fla.; Western Reserve University School of Medicine, 1885; aged 86; died March 16. Dr. Mantey formerly practiced in Minerva, moving to Eustis 36 years ago. His widow and a son survive.

Jay S. Mead, M.D., Lorain; University of Michigan Homeopathic Medical School, Ann Arbor, Mich., 1883; aged 87; former member of the Ohio State Medical Association and the American Medical Association; died April 25. Dr. Mead first practiced medicine in Adrian, Mich., and in 1890 moved to Lorain after a short time at St. Marys, Ohio. Last Fall he was one of six physicians given special recognition by the Lorain County Medical Society for long years of service as phy-



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The Good Neighbor Fleet

sicians. Dr. Mead was a member of the Congregational Church. He is survived by his widow, and a brother, Dr. Fred S. Mead, Mound City, Kansas.

George Andrew Rigrish, M.D., Charleston, W. Va.; Medical College of Ohio, Cincinnati, 1896; aged 70; former member of the Ohio State Medical Association and the American Medical Association; died April 7. Dr. Rigrish practiced in Defiance until 1920, when he moved to Charleston, W. Va. He was a Mason and a member of the Lutheran Church. His widow, a daughter and a brother survive.

Lawrence Harry Sander, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1901; aged 63; died May 1. Dr. Sander practiced in Cincinnati for over 30 years. He was a member of the Catholic Knights of Ohio. Surviving are his widow, a son, three brothers and two sisters.

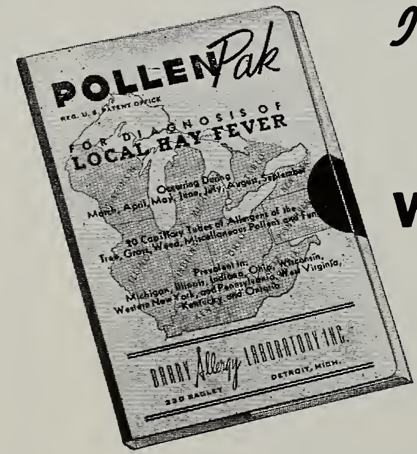
David Heilman Schall, M.D., Canton; National Normal University College of Medicine, Lebanon, Ohio, 1896; aged 78; died May 1. Dr. Schall located in Canton in 1917 after having practiced 21 years in Carroll County. Surviving are his widow, four sons, one daughter, three brothers and two sisters.

Walter S. Scully, M.D., Reynoldsburg; Starling Medical College, Columbus, 1897; aged 69; died March 2. Dr. Scully retired in 1921 after having practiced in Reynoldsburg and Groveport. Surviving are his widow, a sister and an aunt.

Arthur Henry Stall, M. D., Akron; Western Reserve University School of Medicine, 1901; aged 65; former member of the Ohio State Medical Association and the American Medical Association; diplomate, American Board of Radiology, Inc.; member, American College of Radiology. Formerly roentgenologist to the Peoples' Hospital and City Hospital, Akron, Dr. Stall retired a few years ago because of ill health. During 1918-19, he was a captain in the Medical Corps of the U.S. Army. Dr. Stall was president of the Summit County Medical Society in 1925. He was a member of the Masonic Order, Nu Sigma Nu and Sigma Alpha Epsilon. Surviving are his widow, two daughters and a sister.

Akron—The new East Akron Community Hospital, formerly the Just-A-Mere Home and Hospital, was formally opened recently. It is a 40-bed institution, with facilities to increase the capacity to 100 beds if the need arises. Staff officers are Dr. W. M. Johnston, chief; Dr. C. R. Anderson, vice-chief; and Dr. A. S. McCormick, secretary.

Greenfield—Dr. W. H. Willson has been reelected a member of the Highland County Board of Health for a five-year term.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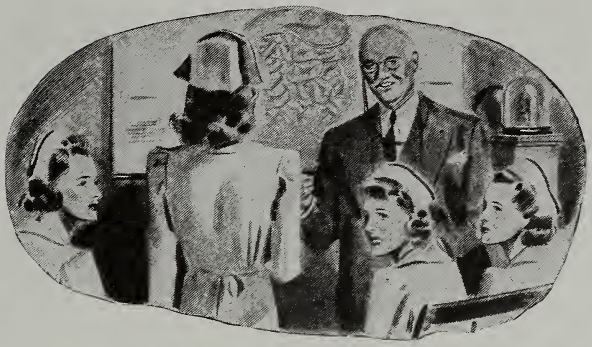

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Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

BUTLER

The Butler County Medical Society met at the Middletown Hospital, Thursday, April 24. During the business session, arrangements were made to cooperate with the proposed N.Y.A. medical care program. A plan was set up for providing medical care in cooperation with the Bureau for Aid to Dependent Children. A committee was appointed to promote the organization of a Woman's Auxiliary. Dr. M. Tischer Hoerner, Dayton, spoke on "The Diagnosis and Treatment of Carcinoma of the Colon".

A Woman's Auxiliary to the society was organized on April 28 and the following officers elected: Mrs. C. I. Stafford, Oxford, president; Mrs. C. J. Chamberlain, Hamilton, vice president; Mrs. F. W. Brosius, Middletown, recording secretary; Mrs. George Flenner, Hamilton, corresponding secretary; Mrs. L. H. Skimming, Middletown, treasurer.—Mabel E. Gardner, M.D., secretary.

HAMILTON

The Academy of Medicine of Cincinnati presented the following programs during May:

May 6—Hospital Night. Program arranged and presented by the staff of the Hamilton County Tuberculosis Sanitorium, in the auditorium of the Sanitorium. "Public Health Aspects of Pulmonary Tuberculosis", Dr. Herman J. Nimitz, Cincinnati; "Pulmonary Tuberculosis and Pernicious Anemia", a case report, Dr. Carl Storey; "Paralysis of the Phrenic Nerve for the Treatment of Pulmonary Tuberculosis", Dr. Lynne E. Baker; "Diabetes and Pulmonary Tuberculosis", with case reports, Dr. Charles A. Castle; "Bronchogenic Carcinoma Simulating Pulmonary Tuberculosis, with Osteopoikilosis and Primary Adenocarcinoma of the Stomach", Dr. Daniel Oscherwitz.

May 13—Hospital Night. Program arranged and presented by the staff of Deaconesses Hospital. "Apoplexy Before the Fifth Decade": Two Unusual Cases. Case No. 1: Massive Intrapontine Hemorrhage (Cerebral Arterioatherosclerosis)", Dr. Harry Lapirow and Dr. Karl V. Kitzmiller; Case No. 2: "Acute Hemorrhagic Encephalopathy (Neoarsphenamine Reaction)", Dr. Foster M. Williams, Dr. Frank H. Mayfield and Dr. Karl V. Kitzmiller; "The Toxicology of Neoarsphenamine with Respect to Cerebral Vascular Injury", Dr. Robert A. Kehoe; "Notes on (and Around) Radiotherapy with Illustrative Lantern Slides", Dr. Charles Goosmann.

May 20—"Symptoms of Alcoholism", Dr. Philip Piker; "Clinical Studies in Multiple Sclerosis", Dr. Howard D. McIntyre.

May 27—Election Night Party.—Bulletin.

HIGHLAND

Dr. A. W. Nelson, Cincinnati, was guest speaker at a meeting of the Highland County Medical Society, at the home of Dr. R. R. Remark, Sinking Spring, Wednesday, May 7.—News clipping.

Miss Grace Wilson told of her work as Highland County health nurse at a meeting of the Woman's Auxiliary to the society, Wednesday, May 2, at Hillsboro.—Mrs. W. B. Roads, secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFELD)

GREENE

Dr. R. E. Pumphrey, Dayton, gave an interesting talk on "Rectal Bleeding", at a meeting of the Greene County Medical Society, Thursday, May 1, at Xenia.—Donald F. Kyle, M.D., secretary.

MIAMI

An address on "Recent Developments in the Treatment of Appendicitis", was made by Dr. E. R. Arn, Dayton, at a meeting of the Miami County Medical Society, Friday afternoon, May 2, at the West Milton Inn, West Milton.—News clipping.

Nineteen members of the Woman's Auxiliary to the society met at the West Milton Inn, Wednesday afternoon, April 2. Mrs. Charles Baker, West Milton, president of the Auxiliary, presided and Mrs. H. W. Kendell, Covington, chairman of Public Relations, read a list of up-to-date medical books which are available at public libraries in the county. Dr. G. A. Woodhouse, secretary of the Miami County Medical Society was the guest speaker. He outlined the aims of the Auxiliary, and explained legislation affecting physicians, then pending in the state legislature.—News clipping.

MONTGOMERY

Dr. E. S. Gurdjian, Detroit, Mich., spoke on "Operative and Non-Operative Management of Acute Head Injury", at a meeting of the Montgomery County Medical Society, Friday evening, May 2, at the Engineers' Club, Dayton. "Diagnosis of Hip Disease in Children", was the topic discussed by Dr. Samuel Flook, at a meeting of the society, Friday evening, May 16.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

MARION

"Tumors of the Larynx", was the subject discussed by Dr. Hugh G. Beatty, Columbus, at a meeting of the Marion Academy of Medicine,

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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Tuesday night, May 6, at the Marion City Hospital.—News clipping.

SENECA

Dr. Emmerich von Haam, Columbus, spoke on "Sudden Death", at a meeting of the Seneca County Medical Society, Thursday evening, May 8, at the Shawhan Hotel, Tiffin. There were 24 members present.—N. E. Williard, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

HENRY

At a meeting of the Henry County Medical Society, Tuesday evening, May 13, at Napoleon, Dr. Donald C. Mebane, Toledo, gave some observations on children in sickness and health, with special emphasis on diet.—News clipping.

PUTNAM

Dr. Edward J. McCormick, Toledo, Councilor for the Fourth District, was the principal speaker at a meeting of the Putnam County Medical Society, Tuesday, May 6. He discussed House Bill 51, the enabling act for medical service plans recently passed by the Ohio General Assembly, and its probable effect on medical practice in Ohio. Dr. Frank C. Clifford, Toledo, gave a brief talk on "Cardiology."—H. N. Trumbull, M.D., correspondent for *The Journal.*

LUCAS

The Toledo Academy of Medicine presented the following programs during May:

May 2—General Meeting of the Academy. "Abdominal Pain in Children", Dr. Clifford D. Benson, professor of surgery, Wayne University College of Medicine, Detroit.

May 9—Section of Pathology, Experimental Medicine and Bacteriology. "Quantitative Methods in the Anemias", Dr. A. H. Sanford, clinical pathologist, Mayo Clinic, Rochester, Minn.

May 23—Surgical Section. "Recognition and Management of Acute Injuries to the Lung", Dr. George M. Curtis, professor of research surgery, Ohio State University College of Medicine, Columbus.—Bulletin.

Dr. Elizabeth Adamson spoke on "A Mental Hygiene Program for Toledo", at a luncheon meeting of the Woman's Auxiliary to the Academy, Wednesday, May 7, at the Inverness Country Club, Toledo.—News clipping.

WOOD

Dr. N. W. Kaiser, of the Toledo State Hospital Staff, was guest speaker at a meeting of the Wood County Medical Society, May 15, at the Woman's Club, Bowling Green. He discussed "Common Psychoses". At the close of the meeting, a rising vote of thanks was tendered Dr.

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Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during May:

May 2—Clinical and Pathological Section. "A Case of Chronic Cholecystitis, Incarcerate Hernia, and Hemachromatosis; Operation and Autopsy Findings", Dr. Arthur Adelman; "A Case of Chorionepithelioma", Dr. H. K. Dimlich; "Chronic Gastritis Simulating Carcinoma of the Stomach", (a) Roentgenography", Dr. Eugene Freedman; "(Gastroscopy)", Dr. Paul Glenn; "(Pathology)", Dr. T. C. Laipply.

May 7—Pediatric Section. "Some Endocrine Problems of Childhood", Dr. Carl E. Zeithaml; "Syphilis or Scurvy in an Infant 14 Months Old?", Dr. J. D. Pilcher; "Congenital Biliary Atresia with Spontaneous(?) Recovery", Dr. Henry J. Gerstenberger.

May 16—Annual Academy Meeting. "Allergy and Its Relation to Chronic Diseases", Dr. Warren T. Vaughan, Richmond, Va.—Bulletin.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

MAHONING

Dr. John A. Toomey, associate professor of pediatrics, Western Reserve University School of Medicine, discussed "The Diagnosis and Treatment of Scarlet Fever, With Special Reference to the Use of Sulfanilamide, Scarlet Fever Antitoxin, and Convalescent Serum", at a dinner meeting of the Mahoning County Medical Society, Tuesday, May 20, at the Youngstown Club, Youngstown. In the evening, Dr. Toomey spoke on "The Portal of Entry of Poliomyelitis".—Bulletin.

PORTAGE

"Standards for Hospital Obstetrical Practice", was the subject of an address made by Dr. Howard P. Taylor, Cleveland, at a meeting of the Portage County Medical Society, Thursday evening, May 8, at the Robinson Memorial Hospital, Ravenna.—Emily J. Widdecombe, M.D., secretary.

STARK

The Annual Summer Outing of the Stark County Medical Society was held at the Alliance Country Club, Alliance, Wednesday, May 21. Following a golf tournament in the afternoon, Cy Hungerford, cartoonist for *The Pittsburgh Post*, provided the entertainment for the dinner session.—Clair B. King, M.D., secretary.

SUMMIT

At a meeting of the Summit County Medical Society, Tuesday evening, May 6, at the Mayflower Hotel, Akron, there was a general discussion of "Trichiniasis, Its Diagnosis and Treatment", illustrated by moving pictures.—Bulletin.

TRUMBULL

Dr. Leonell G. Strong, of the Yale University School of Medicine, spoke on some recent findings in the field of cancer research at a dinner meeting of the Trumbull County Medical Society, Monday, April 21, at the Y.W.C.A., Warren.—News clipping.

Mrs. Edward Trescott reviewed the book, "From Many Lands", at a meeting of the Woman's Auxiliary to the society, Tuesday afternoon, May 6, at the home of Mrs. J. D. Knox, Warren.—News clipping.

Seventh District

(COUNCILOR: CARL GOEHRING, M.D., STEUBENVILLE)

BELMONT

"The Practical Uses of Sulfanilamide and Its Derivatives", was the subject presented by Dr. James H. Warren, Columbus, at a meeting of the Belmont County Medical Society, Thursday after-

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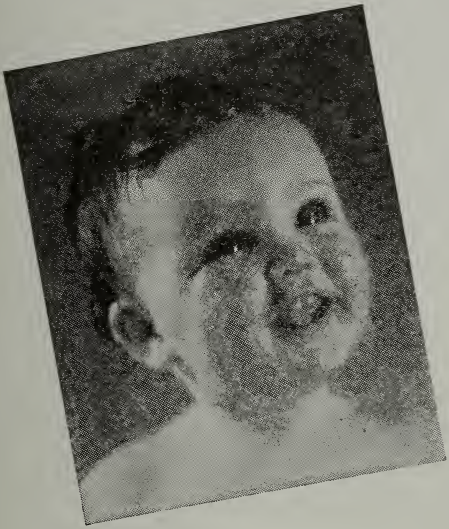

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noon, May 8, at Kilkenny Inn, Bellaire.—C. W. Kirkland, M.D., secretary.

COSHOCTON

Dr. Joseph H. Shepard, Columbus, was guest speaker at a meeting of the Coshocton Medical Society, Tuesday evening, April 29, at Coshocton. —News clipping.

TUSCARAWAS

At a meeting of the Tuscarawas County Medical Society, Thursday, April 10, at the Hotel Reeves, New Philadelphia, Dr. Charles A. Doan, Columbus, professor of medicine, Ohio State University College of Medicine, spoke on "Recent Advances in the Understanding and Treatment of Influenza and Its Hemolytic Streptococcus Complications".—News clipping.

Members of the society gave a farewell party for Dr. Max Shaweker at Dover, Wednesday evening, April 16. Dr. Shaweker is now on active duty at Norfolk, Va., as a lieutenant-commander in the Medical Corps of the U. S. Navy.—News clipping.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

GUERNSEY

Dr. Clyde W. Dawson, Columbus, gave a talk on "Low Back Pain, With Differential Diagnosis", at a meeting of the Guernsey County Medical Society, Thursday, May 1, at the Hotel Berwick, Cambridge.

Speakers at a meeting of the society, Thursday, May 15, were Dr. Charles F. Bowen, Columbus, who discussed "Cancer and Colored Photography", and Lt. Col. Howard E. Boucher, chief medical officer of Selective Service for Ohio, who spoke on the duties of medical examiners.—M. J. Thomas, M.D., secretary.

MUSKINGUM

Dr. Robert T. Allison, Jr., Akron, spoke on "Empyema and Other Chest Disorders", at a meeting of the Muskingum County Academy of Medicine, Friday evening, May 9, at the University Club, Zanesville.—News clipping.

PERRY

Dr. Charles W. Pavey, Columbus, discussed "Sterility in Women," at a meeting of the Perry County Medical Society, Thursday noon, May 15, at New Lexington.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

MEIGS

The Meigs County Medical Society honored Dr. Robert R. Boice, Tuesday evening, April 29, with a farewell party at the Hotel Martin, Pomeroy.

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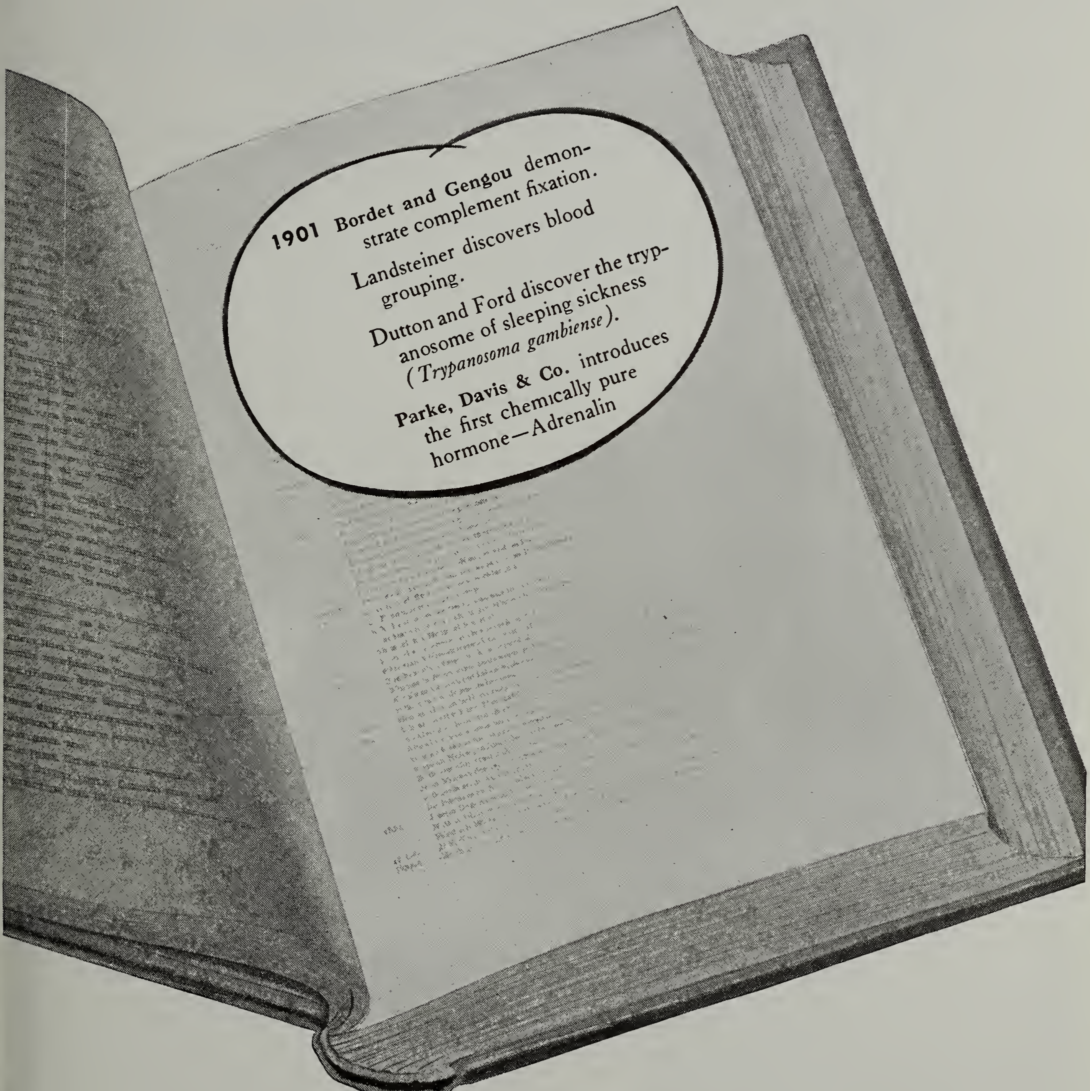

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Dr. Boice is now on active duty in the Medical Corps of the U. S. Army at Jacksonville, Fla.—News clipping.

SCIOTO

Dr. Judson D. Wilson, Columbus, spoke on "Low Back Pain", at a meeting of the Hempstead Academy of Medicine, Monday evening, May 12, at the Portsmouth General Hospital.—Sol Asch, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

The Columbus Academy of Medicine presented the following programs during May:

May 5—"The Value of Roentgen Therapy as an Aid in the Differential Diagnosis of Mediastinal Tumors", Dr. Lawrence Reynolds, Detroit, Mich., editor of the *American Journal of Roentgenology and Radium Therapy.*

May 19—"Non-Surgical Biliary Drainage in the Diagnosis of Diseases of the Gallbladder", Dr. Augustus A. Hall, with discussion lead by Dr. W. B. Morrison and Dr. C. J. DeLor.

May 15—Section in General Medicine. Three motion pictures: "Left Mediolateral Episiotomy and Repair"; "Allergy;" "Pneumonia". Discussion by a member of the staff of St. Ann's Hospital.—Bulletin.

KNOX

Mrs. Julius Shamansky read a paper on "The Progress of Medical Science", at a meeting of the Woman's Auxiliary to the Knox County Medical Society, Wednesday evening, May 7, at the home of Mrs. W. W. Pennell, Mt. Vernon. Mrs. H. W. Blair was co-hostess.—News clipping.

MADISON

Dr. James H. Warren, Columbus, spoke on "Undulant Fever", at a meeting of the Madison County Medical Society, Thursday evening, April 24, at the home of Dr. F. E. Rosnagle, London.—News clipping.

ROSS

"Surgical Treatment of the Larynx", was the subject discussed by Dr. Hugh G. Beatty, Columbus, at a meeting of the Ross County Academy of Medicine, Thursday evening, May 1, at the Chillicothe Country Club.—News clipping.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

LORAIN

At a meeting of the Lorain County Medical Society, Tuesday afternoon, May 13, at the Spring Valley Country Club, Elyria, Dr. Harry G. Sloan, Cleveland, spoke on "The Life History of Goitre—Cause, Prophylaxis and Treatment".

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Are the Neuritic Symptoms of Pregnancy *due to a deficiency of vitamin B_1 (thiamine)?*

SUCH common neuritic symptoms of pregnancy as pains in arms and legs, muscle weakness, and (less frequent but more serious) paralysis of the extremities may result from a shortage of antineuritic vitamins, recent investigations appear to show. Although neuronitis of pregnancy has long been considered a toxemia, no toxins have ever been identified.

Clinical observations of Strauss and McDonald lead to the conclusion that the condition is a dietary deficiency disorder similar to beriberi, caused by lack of vitamin B_1. They report recovery in their cases receiving this therapy, including dried brewers' yeast.

Hyperemesis as Cause of Avitaminosis

Wechsler observes that all cases of polyneuritis of pregnancy recorded in the literature were preceded by long periods of severe vomiting. "It would seem," he adds, "that because of actual starvation these patients suffered from avitaminosis and consequent neuritis," a view likewise held by Hirst, Luikart, and Gustafson. Plass and Mengert observe that the practice of giving high carbohydrate feedings for hyperemesis gravidarum is still more likely to cause avitaminosis.

Dried brewers' yeast, as it is far richer than any other food in vitamin B_1 (thiamine), is being used with benefit both in the prevention and treatment of polyneuritic symptoms of pregnancy. Lewy found that additions of yeast to the diet reduced electric irritability of the peripheral nerves and brought clinical improvement. Vorhaus states that he and his associates, after administering large amounts of vitamin B_1 (thiamine) to 250 patients having various types of neuritis, including that of pregnancy, observed in about 90% of cases "varying degrees of improvement, i.e., from partial relief of pain to complete disappearance of all symptoms."

Need for Vitamin B_1 (thiamine) in Lactation

Evans and Burr, Hartwell, Sure and co-workers, and Macy *et al* are among numerous authorities who find that the nursing mother also needs a supplement of vitamin B_1 (thiamine) from 3 to 5 times the normal requirement. It is accepted that during pregnancy and lactation the requirement for vitamin G (riboflavin) is increased.

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Dr. Geo. D. Nicholas gave an address in tribute to the memory of the late Dr. Jay S. Mead.—L. H. Trufant, M.D., secretary.

MEDINA

Dr. Frank S. Gibson, Cleveland, was guest speaker at a meeting of the Medina County Medical Society, at the Evanon, Medina, Thursday night, April 17.—News clipping.

RICHLAND

"Skin Cancer", was the topic considered by members of the Richland County Medical Society, Thursday afternoon, May 15, at the Mansfield General Hospital. The panel discussion was led by Dr. F. H. Maxwell, Dr. B. M. Hathaway and Dr. H. T. Stiles.—Geo. L. Evans, M.D., secretary.

New officers of the Woman's Auxiliary to the Society are: Mrs. Lincoln Fisher, president; Mrs. S. C. Schiller, president-elect; Mrs. C. L. Shafer, vice-president; Mrs. Leonard Hautzenroeder, secretary; Mrs. C. E. Hunter, corresponding secretary, and Mrs. C. L. Hannum, treasurer.—News clipping.

Public Health Institute Planned

A Public Health Institute will be held in Cleveland, June 19 and 20, in conjunction with the annual meeting of the Buckeye State Medical, Dental and Pharmaceutical Association. Sponsors of the institute for colored professional men are the Buckeye Association, Cleveland Medical Association, Forest City Dental Association, Cleveland Graduate Nurses Association, Ohio Public Health Association and the Anti-Tuberculosis League of Cleveland and Cuyahoga County. Speakers include: Dr. R. W. Hixson, Cleveland; Dr. H. S. Goodloe, Toledo; Dr. C. Leon Wilson, Chicago; Dr. Walter Maddux, Birmingham, Ala.; Dr. J. E. Wallace, Cleveland; Dr. T. K. Lawless, Chicago; Dr. W. Roderick Brown, Pittsburgh; Dr. J. C. Placak, Dr. R. C. McKay, Dr. Leon S. Evans, Dr. A. P. Young, Dr. George W. Binkley, Cleveland; Dr. F. S. Walker, Canton; Dr. A. F. McCoy, Columbus; Dr. Lloyd H. Cox, Dayton.

Athens—Speakers at a "Regional Institute of Nutrition for Defense" with representatives present from 13 southeastern Ohio counties, included Dr. Jonathan Forman, Columbus, who talked on "Relationship of Nutrition to Physical and Mental Health".

Cincinnati—At a meeting of the Cincinnati Society of Neurology and Psychiatry at the University Club, May 1, Dr. Howard D. McIntyre discussed "Studies in Disseminated Sclerosis".

Delaware—Dr. Geo. F. Moench, health commissioner of Delaware and Union counties, spoke on "Public Health" at a meeting of the Fredericktown Lions Club. Dr. Moench also talked recently at a meeting of the Ashley P.T.A.

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The Physician's Bookshelf

Foods and Nutrition, by Fern Silver ($1.76. *D. Appleton-Century Company, New York)* is an excellent high school text on the subject. Its splendid presentation compels your reviewer to suggest you read for the fear the younger generation will get ahead of us who should be leaders in this field.

Photelometric Clinical Chemistry, by William S. Hoffman, Ph.D., M.D. ($3.00. *Wm. Morrow, New York)* is a concise manual of clinical quantitative methods in photometric chemical analysis. This new method is rapidly taking a prominent place in our clinical laboratories and deserves the consideration of all of us.

Textbook of Healthful Living, by Harold S. Diehl, M.D. ($2.75. *McGraw-Hill Book Company, New York)* is the best text of its kind which has come to our attention. It is aptly dedicated to those who prefer facts to fads, sanity to superstition, understanding to belief.

Mine Eyes Have Seen—A Woman Doctor's Saga, by Alfreda Withington, M.D.; introduction by Sir Wilfred Grenfell ($3.50. *E. P. Dutton & Company, New York)* is another autobiography of a distinguished physician. This one, however, recites the story of 86 years, packed with unusual experiences. Practice in the slums of New York, postgraduate study in Zurich, Vienna and Prague; friendship with Masaryk; private practice in Pittsfield; a summer in Labrador; chief of Franco-American Dispensary and Hospital at Dreux during the World War I; Angina and home; at work in Pine Mountain Settlement in Kentucky; and now life in Washington. Truly an inspirational story of a life devoted to medicine and the treatment of the sick.

First Aid in Emergencies, by Eldredge L. Eliason, M.D. ($1.75. Tenth Edition. *J. P. Lippincott Company, Philadelphia)* offers a complete, dependable handbook covering all the emergencies arising in everyday life.

Our Youth.. Helping Them to Help Themselves, by George Sanford Foster, M.D. ($1.25. *Fleming H. Revel, New York)* is a sincere plea for the square deal for youth. He pleads for a social security which does not merely offer a synthetic job, a money allowance, or a store order, but the greatest right of an American to accept his own responsibility in his family, his community and his Government.

Health and Longevity, by Charles M. Baird ($1.75. *Christopher Publishing House, Boston)* presents the author's ideas on these related subjects. It is a plea for annual physical examinations and obedience to the laws of Nature. Much emphasis is placed upon subclinical deficiency states as a common cause of many pathologic states. The usual rules of personal hygiene are laid down briefly and clearly.

Clinical Diabetes Mellitus and Hyperinsulinism by Russell M. Wilder, M.D. ($6.00. *W. B. Saunders Company, Philadelphia)* is a most valuable monograph on the clinical consideration of the disease. Like most books of its kind it is so much the more valuable because it sets forth clearly the procedures which a busy and successful clinician has found useful in the management of his own patients, in this instance, those per-

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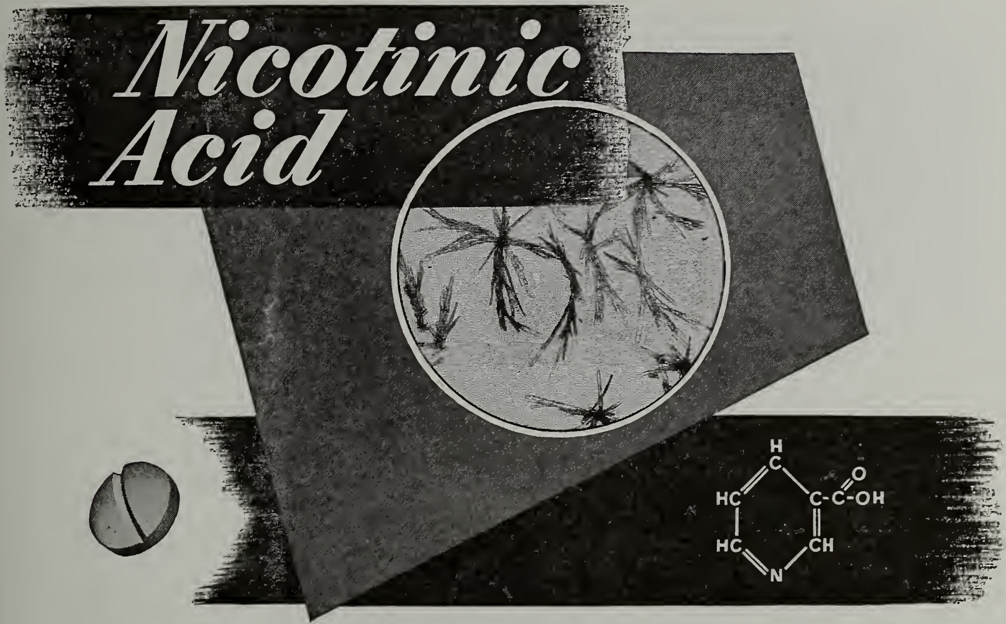

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Health, Mental, Moral and Physical, by H. W. Soper, M.D. ($1.50. *Christopher Publishing House)* is by this well-known gastroenterologist, and presents clearly the idea that health is not only a physical problem, but also a mental and ethical one as well. The book includes his well-known essay "On the Case Against Milk." Sensible advice is given on under-nutrition, over-nutrition and malnutrition.

Emergency Surgery, by Hamilton Bailey ($15.00. *Fourth Edition, A William Wood Book, Baltimore)*, attempts, and very successfully, to tell when to operate, when not to operate, and how to operate under emergency conditions. The clarity of text is greatly helped by 930 excellent illustrations. An excellent book for the surgeon who is not necessarily a specialist.

Physical Diagnosis by Ralph H. Major, M.D. (Second Edition. *W. B. Saunders Company, Philadelphia)* presents an enlargement of the sections on the abdomen, genitalia, and extremities. A good text brought up to date and improved through teaching experience of the author and many of his friends.

Fractures and Dislocations by Edwin O. Geckler, M.D. ($4.00. Second Edition. *Williams & Wilkins, Baltimore)* shows one good method for the treatment of every common type of fracture and dislocation. This method is always well illustrated.

Man Alive, You're Half Dead, by Daniel C. Munro, M.D. ($2.00. *Dudley Courtenay, New York)*, presents the personal views of the medical director of Lake Placid Club. The author makes a good case for positive health. Strange, he underwrites the idea that certain foods will not mix.

Thirteenth Anniversary Number of the Harofe Haivri ("The Hebrew Medical Journal")—The attention of the medical profession is directed to the appearance of a special issue of *Harofe Haivri* (The Hebrew Medical Journal), a semi-annual publication, edited by Dr. Moses Einhorn. This volume commemorates the thirteenth anniversary of this journal and is dedicated to Prof. Sigmund Freud.

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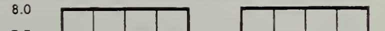
> —John Lovett Morse, A.M., M.D.
> Clinical Pediatrics, p. 156.



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tionary, the original articles are summarized in English, to make them available to those who are unable to read Hebrew.

For further information, communicate with the editorial office of the Harofe Haivri, 983 Park Avenue, New York City.

More Years for the Asking, by Peter J. Steincrohn, M.D. ($2.00. *D. Appleton-Century, New York)* is a creditable attempt to popularize the periodic health examination. It tells laymen that if they want to add 10 years to their lives, they can do it, but it will require their complete and continual cooperation with an intelligent physician. He then makes the point that degenerative processes still exact too great a toll from those past middle life. A good book to use in counsel with your periodic health work. Incidentally, why do not more of us increase our incomes and our service to mankind in this way?

Is Love Enough? A Discussion of The Problems of the Home and of Married Life, by Bella Wood-Comstock, M.D. ($1.25. *Pacific Press Publishing Association, Mountain View, California)* presents good reasons for the return of home life and the resumption of the responsibilities of parenthood. Idealistic! Gone with all of the other ideals of our fathers! Serious studies of the sex and home life in several nations tend to show that these things are gone except for certain teachers, writers, and professional people who do not get the direct impact of modern industrialization. Love, parenthood, and family life as depicted require leisure and knowledge of how to use it. You have won short working hours. Keep out of night clubs, movies, quit trying to keep up with the Joneses and live for your family. If you want to recall what you and yours are missing in your only trip through this world, read this book.

Living, by Thurman B. Rice, M.D. ($2.25. *Scott, Foresman and Company, Chicago)* divides this topic into three parts—personal, mental and environmental hygiene. In this way the author produces a text which gives the student an adequate conception of what he is to do about the vital problems of his family.

Biological Aspects of Infectious Disease, by F. M. Burnet, M.D. ($3.75. *Macmillan, New York)* is an attempt to correlate infectious diseases with the work in other fields of biology. This approach makes an excellent starting point for a study of the subject—even for a medical man.

Textbook of Pediatrics, by J. P. Crozer Griffith, M.D., and A. Graeme Mitchell, M.D. (Third edition, revised. *W. B. Saunders Company, Philadelphia)* has been brought up to date with the aid of some 60 consulting authorities.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 July, 1941 No. 7

JONATHAN FORMAN, M.D., *Editor*

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Recent Progress in Endocrinology

E. VON HAAM, M.D.

WITH the progressive conquest of infectious diseases and nutritional deficiencies during recent years our attention has been centered more and more on endocrine disturbances as the responsible factor in the creation of abnormal or ill-fitting personalities, and during the past years an immense number of papers have appeared in the medical literature dealing with the effects and interrelations of the various hormones. Endocrinology, once regarded more as a scientific hobby, has become a recognized medical specialty, and in numerous recent textbooks on endocrinology the correlations between the glands of internal secretion and human diseases are discussed. By the end of the third decade an amazing progress in our knowledge of the various hormones, their isolation, chemical composition and therapeutic application had been made.

The last one or two years have been spent mainly in the confirmation and elaboration of data already secured and in the study of the complicated system of interglandular correlations, without adding anything sensationally new to our knowledge of endocrinology. Research activities abroad have been severely handicapped, and while American scientists attempted to iron out a few of the many points of contention between existing theories, our medical practitioners continued to build up a sounder basis for the diagnosis and therapy of endocrine dyscrasias. In discussing briefly the progress which has been made during the past year in the field of endocrinology reference will be made also to the numerous investigations conducted by the College of Medicine of Ohio State University in this field.

The Author

● Dr. von Haam, Columbus, Ohio, is a graduate of University of Vienna, 1926; member American Association for Cancer Research, Association for the Study of Internal Secretion, American Society of Clinical Pathologists, American Association of Pathologists and Bacteriologists, American Society of Tropical Medicine; member of general staff at Starling Loving University, Children's, and St. Francis Hospitals; professor of pathology, Ohio State University.

I. PITUITARY

The hormones whose existence may be regarded as firmly established can be divided according to Goldzieher[1] into two groups: those produced by the eosinophil cells—the growth hormone, the prolactin and the various metabolic factors of the pituitary; and those produced by the basophil cells of the pituitary—the gonadotropins, the thyrotropic, corticotropic and other organotropic hormones. Intermedin, pitocin and pitressin are the substances secreted by the intermediate and posterior lobes. Attempts to separate these hormones and produce purified fractions have been continued. Using the method of isoelectric precipitation Fevold, Lee, Hisaw and Cohn[2] could separate the adrenotropic, gonadotropic, thyrotropic, luteinizing and growth factors in the sheep pituitary. Bonsnes and White,[3] using fractionation of 2 per cent saline extracts at various pH levels with precipitation by acetone, were also able to effectively separate lactogenic, thyrotropic, adrenotropic and growth

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Submitted January 28, 1941.

promoting factors. Quantitative studies on the gonadotropic hormones of human and mammalian pituitaries have been published by Witschi,[4] who recommended the rat vaginal unit as the most adequate measure of follicle stimulating hormones. As a specific test animal for the assay of luteinizing hormone the African weaver finch was suggested. Using both methods of assay Witschi studied the relationship between the follicle stimulating and luteinizing factors of the pituitaries from different species. The pituitary of man ranks highest in FSH factor, while the male opossum and cotton-tail rabbit are highest in the luteinizing factor. The beef pituitary, the gland most commonly used for therapeutic preparations, was found to be very poor in FSH factor. Analyzing by the same method pituitaries from humans of different ages Witschi[5] found that the pituitaries of men are more active than those of women of the same age; pituitaries of castrates and of menopausal women have the highest activity. No distinct variations according to age and sex were found in the concentration of thyrotropic, lactogenic and melanophore stimulating hormones.

A new method of assaying adrenotropic potency was suggested by Bates, Riddle and Miller.[6] Using two-day-old chicks they proposed as one adrenotropic unit the amount required for a 25 per cent increase in adrenal weight. Blumenthal[7] preferred the index of mitotic activity in the immature female guinea pig adrenal as a much more sensitive indicator of stimulation than weight increase of the gland.

The cytological changes in pituitaries produced by administration of pituitary extract were studied by Severinghaus and Thompson.[8] Changes in the appearance of the basophils resembling those following castration were most prominent. As interpretation of these changes the author assumes that a short lasting activation of the dependent glands by the injected pituitary extract is interrupted by the appearance of antihormones which then produce atrophy of these glands with the characteristic anterior lobe changes of gonadectomy and thyroidectomy.

Destruction of the pituitary and the hypothalamic region by chromic acid led to evidence of obesity and dwarfism, according to Hetherington.[9]

RELATIONSHIP BETWEEN PITUITARY AND CARBOHYDRATE METABOLISM

The complicated relationship between pituitary and the carbohydrate metabolism can be partly explained, according to Young,[10] by activation of the adrenal gland. However, not all diabetogenic effects of the pituitary can be explained in this manner, and specifically the increased insulin sensitivity which is noted in hypophysectomized animals must be explained by the presence of a yet unisolated diabetogenic principle.

The clinical diagnosis of pituitary diseases has been much advanced by perfected methods of laboratory assays of gonadotropic hormone. They are excreted in quantitative relationship into the urine and can be determined by simple methods of precipitation and bioassay in immature or hypophysectomized animals, von Haam.[11] They are present only in small amount in the urine of children, but increase at puberty and can be regularly demonstrated some months before menarche. In adult women an irregular cyclic urinary excretion can be demonstrated with a peak usually at the mid-period of menstruation, von Haam and Rothermich.[12] In castrates or at the menopause prolan excretion increases, Walter, Geist and Salmon,[13] although not every woman must show this phenomenon, Fluhmann.[14] This increase is an important differential diagnostic characteristic between primary and secondary hypogonadism and will disappear under a proper replacement therapy. The differential diagnosis of various forms of basophilism is made possible by the presence of gonadotropic and androgenic factors in the urine, according to Crooke and Callow[15] and Dorfman and coworkers.[16] The presence of androgens in high concentration is strongly suggestive of adrenal tumor, while the pseudovirilism together with metabolic disturbances (rise in blood pressure, change in the glucose tolerance) is suggestive of basophilism.

In our clinic the latter picture constitutes a well circumscribed symptom which could be observed by us in all age groups and all stages of development. While usually introduced by signs of sexual hypermaturity without virilism, overstimulation of the adrenal usually leads soon to marked hirsutism and some hypertrophy of the clitoris. After a certain time has elapsed evidence of gonadal failure becomes evident, while hypertension and obesity increase. Urinary hormones are always absent in pituitary cachexia, according to Doane, Blumberg and Teplick,[17] and this lesion is especially frequent due to late effects of postpartum necrosis of the gland. Postpartal hypoglycemia and complete failure of lactation are threatening symptoms, while true emaciation does not have to be present. The B.M.R., the blood pressure, and the appetite are low, Sheehan.[18] The diagnostic significance of cranial dysplasia is again emphasized by Goldzieher.[19] Development of the paranasal sinuses is inhibited in infantile pituitary disease, while excessive expansion of the cancellous bone and of the sinuses is noted in instances of excessive anterior lobe activity. Later a progressive diffuse sclerosis of the cranial bones will result, which may appear in a hypoplastic skull or superimposed upon overexpanded cancellous bone tissue. Although occasionally evidence of such pituitary cranial dysplasia has been in agreement with our clinical findings, we would hesitate to recommend it too strongly as a differential diagnostic sign.

The therapy of pituitary disorders is still hoping for potent glandular extracts within the economic reach of the majority of patients. All attempts by the various laboratories to produce commercially the isolated and purified fractions of the pituitary gland in effective concentrations have either failed or have produced solutions of such low potency that the therapy is too expensive to become popular. In our experience the whole glandular extract is still the one best suited for replacement therapy. Pituitary stimulation by other means at the present time has been little successful. Increased activity following irradiation with small doses of X-ray has been observed by Silbernagel and Fidler,[20] but utmost care must be recommended that the activity of the already weak gland is not still further decreased by an overdose. Experiments in our own laboratory, Milliser,[21] suggest the possibility of suppressing the castration cells in the rat by large doses of X-ray. Experiments in humans, however, have shown this method of treatment too unreliable to be so far of any practical value. Fischer[22] reported successful treatment of schizophrenia with pituitary extract. His suggestion should await further confirmation before it should be accepted by the practicing physician.

A laudable effort to standardize pituitary and pituitary-like gonadotropins has been made by D'Amour and D'Amour,[23] who determined the biological potency of the international unit of standard chorionic gonadotropin as recommended by the League of Nations. Twenty-one-day old rats injected once a day for three days with the substance to be assayed and killed at the end of 100 hours was suggested as a standard animal. Determination of the uterine weight and the presence of vaginal cornification were suggested as the most reliable method for assay. We have found the mouse uterus the most sensitive organ for the assay of gonadotropins, in agreement with Evans and coworkers[24] and others.

II. THYROID

Recent progress in our knowledge of the pathologic physiology of the thyroid gland has been made principally by continued biochemical studies of the iodine metabolism in our body and the use of radioactive isotopes of iodine. The importance of a certain minimal reserve iodine for the maintenance of life over long periods is now an established fact, and as the most specific indication of iodine deficiency hyperplasia of the thyroid is generally recognized, Salter.[25] Careful metabolism studies by Curtis and coworkers[26] have shown that the normal body maintained on a low iodine intake will produce a negative iodine balance. In a patient with exophthalmic goiter on the same low iodine intake this negative balance is markedly increased, demonstrating an increasing loss of iodine intake in spite of high blood iodine values. In the hypothyroid patient the excretion of iodine very soon reaches low levels due to the inability of the athyriotic organism to store iodine, Salter.[25] An important biochemical difference between toxic nodular adenoma and diffuse exophthalmic goiter with regard to calcium metabolism has been pointed out by Puppel, Klassen and Curtis,[27] who could demonstrate a marked difference in the calcium balance between these two types of lesion. Although the iodine balance, the B.M.R., the blood calcium and the blood iodine are approximately similar in both instances, the negative calcium balance is more than three times as high in the cases of exophthalmic goiter than in toxic nodular goiter, demonstrating that other glandular factors probably accompany the lesion of exophthalmic goiter bringing about this calcium metabolism disturbance.

RECENT RESEARCH METHODS

Recent research methods using "tagged" atoms have been very successfully applied to the study of thyroid disease by the discovery of fairly stabile radioactive isotopes of iodine. Thus iodine with a molecular weight 131, having a half life of eight days, has been prepared and its presence even in small concentration can be readily detected by the Geiger-Mueller radio counter. In the experiments of Hamilton and Soley[28] with labeled iodine in human subjects it was found that 80 per cent of the administered iodine was absorbed by the intestines at the end of one hour. Hertz and coworkers[29] showed that the normal thyroid collected up to eighty times more the quantity of iodine than expected from uniform diffusion throughout the tissues. In hyperplastic states the relative concentration can be increased several hundred fold. The time necessary to reach the maximum concentration of iodine retained in the thyroid gland is as short as 15 minutes, after which period the thyroid concentration remains constant for days. Direct in vivo measurements of iodine in the thyroid of individuals receiving a single dose of iodine 131 resulted in characteristic curves which lend themselves to the purpose of clinical differentiation, according to Hamilton.[30] Hypothyroidism without goiter showed practically no storage. In the normal gland a 4 per cent uptake is reached during the first day and maintained over several days. In the patient with toxic goiter a rapid concentration up to 12 per cent takes place within a short time and slowly decreases to the concentration level of normal thyroid glands, which is maintained. In the nontoxic goiter of nodular type up to 12 per cent of the iodine is retained in the thyroid gland, the absorption curve being similar in character to those of normal thyroids. In nontoxic goiter associated with hypothyroidism marked absorption up to 30 per cent is seen shortly after administration of iodine, which has a tendency to fall below the normal level within two days.

The question as to radiation therapy with radioactive iodine has been discussed by Hertz, Roberts, Means and Evans,[29] who believe that it may be feasible in cases of thyroid hyperplasia, while it is less promising in cases of neoplasia since malignant tissues do not store radioactive iodine to any amount. Overdoses of vitamin A and C lead to a suppression of thyroid activity according to Carriere, Morel and Gineste.[31] Vitamin B_1 and D have a contrary effect. Vitamin A and C deficiency lead to short-lasting stages of hyperactivity. The clinical importance of a subdivision into primary and secondary hypothyroidism is stressed by Solomon, Weiss and Hochstein.[32] Secondary hypothyroidism is more commonly associated with polyglandular deficiency due to its common source of origin in the pituitary gland.

III. ADRENAL

One of the more important recent contributions to the physiology of the adrenal is without doubt the isolation of a specific factor from extracts of this gland by Hartman and his group,[33] which controls the excretion and retention of sodium chloride. This principle, which for lack of knowledge of its chemical structure was named the "sodium" factor, could be separated from purified cortin by a complicated method of interchange between water and ethyl ether. It could be proven that cortical extract without sodium factor maintained the life of the animal but could not prevent loss of chlorides through the kidneys, while administration of the sodium factor alone prevented sodium depletion without, however, being able to maintain the life of the animal.[34]

In an attempt to devise reliable tests for the clinical diagnosis of adrenal deficiency Greene, Levine and Johnston[35] gave patients orally 19 mg. of potassium chloride per pound of body weight and then determined the blood potassium before, a half hour, one hour and two hours afterwards. In disagreement with Zwemer,[36] the authors came to the conclusion that the test was of no diagnostic value and actually dangerous by precipitating an adrenal crisis in one of their cases. A similar opinion was expressed by Dryerre[37] concerning the feeding test described by Cutler, Power and Wilder.[38]

The diagnosis of cortical hyperadrenalism is made at the present time principally upon evidence of androgenic hypersecretion. Evidence that sex hormones are produced by the cortex of the adrenal gland is principally clinical, Looney.[39] A study of 80 female patients showing virilization of the adrenal showed an affection of the menstrual cycle in over 70 per cent, Del Castillo, Schlossberg and Curuchet.[40] The younger patients presented a premature appearance of libido and intense orgasm. A common occurrence is the masculinization of females by an adrenal cortical tumor. Refeminization after operation with disappearance of hirsutism has been reported by Lukens and Palmer.[41] The assay of androgenic substances in the urine has been suggested as an important diagnostic aid. The weight of evidence seems to indicate that the life-sustaining factor of the cortex does not itself affect the gonads but that the cortex contains principles distinctly different from cortin which have gonadic activity. These factors unquestionably may be a source of male as well as female sex hormone. Histologically a cell with fuchsinophil staining properties has been emphasized by Fujiwara[42] as androgenic cells of the adrenal cortex. Further proof that the adrenals have an andromimetic function was brought by Burrill and Greene,[43] who demonstrated, however, this quality only in young animals. Hooker and Collins[44] showed that the androgenic potency of desoxycorticosterone itself was one thirtieth that of andosterone.

In the treatment of adrenal cortical deficiency Ingle[45] could show that the synthetic desoxycorticosterone acetate was less effective in the treatment of adrenalectomized rats than corticosterone isolated from the adrenal cortex. Also Long and his coworkers[46] emphasized that cortical extracts have a much greater effect on the carbohydrate metabolism of normal and adrenalectomized rats than the synthetic desoxycorticosterone esters. In an exhaustive review on the correlation between adrenal cortex and carbohydrate metabolism, Long, Katzin and Fry[46] pointed out that cortical extract produces a marked increase in the liver glycogen of fasted, and in the liver and muscle glycogen of fed, adrenalectomized animals. During this process the low nitrogen excretion is augmented by cortical extract, which suggests an increased protein catabolism as source of the newly formed carbohydrate. Cortical extract also prevented the disappearance of glycogen in the liver of hypophysectomized rats following starvation, Fitzgerald and Verzar.[47] Its use together with fluid and salt administered in the case of various infections, including 17 cases of pneumonia, produced maintenance of normal blood pressure, decrease in generalized toxicity, avoidance of circulatory collapse, maintenance of appetite and shortening of convalescence, Perla and Marmorston.[48]

IV. MALE SEX HORMONES

Few new data were added experimentally to our knowledge of the effect of male sex hormones on male and female animals. Stone[49] demonstrated that 0.62 mg. administered to rats 22 to 26 days old advanced the day of first copulation by about 20 days. Spermatogenesis could not be induced with testosterone in hypophysectomized rats younger than 34 days. In 29-day-old normal rats spermatogenesis advanced normally in spite of testosterone administration, Cutuly and Cutuly.[50] In newborn female rats administration of 1 mg. testosterone daily for the first 30 days caused a prolonged hypoplasia of ovary, uterus and vagina, their development remaining delayed after treatments had been discontinued, Selye.[51] The question of the therapeutic value of testosterone implantations was answered in a favorable sense by Vest, Drew and Langworthy,[52] who demonstrated that an average absorption of 1 to 5 mg. of testosterone from implanted hormone pellets took place in immature macaque monkeys. The effect on the seminal vesicles and prostate was comparable to much larger doses administered parenterally.

In the clinical diagnosis of male sex hormone deficiency the chemical method of assay attracted wide attention in England and the Americas. Refinement of the method based on the Zimmerman reaction finally resulted in a method of great accuracy and practical feasibility for the diagnostic assay of androgenic substance in the urine. Callow and coworkers[53] recommend a brief hydrolysis with 15 volumes per cent of hydrochloric acid and removal of the phenolic and estrogenic fractions by washing the ether extract with strong alkali and water. Talbot, Butler and MacLachlan[54] separate the nonketonic fraction, which is usually colored and interferes with the colorimetric determination, from the ketonic fractions representing the male sex hormone by treating the dried residue of the phenol and estrogenfree ether solution with Girard's Reagent T. As normal values an average amount of 5 to 8 mg. of 17-ketosteroids was found in our laboratory for the female as compared to 9 to 11 mg. for males. A significant decrease can be noted in cases of hypogonadism in the male, while a significant increase in female urine suggests the presence of adrenal virilism. The importance of a definite relationship between androgens and estrogens for the maintenance of normal menstruation has been stressed by Hamblen.[55]

Therapeutically, testosterone has been tried in all types of endocrine and other metabolic disorders. Silberman, Radman and Abarbanel[56] administered and implanted testosterone in women with menopausal symptoms. The result was considered satisfactory without return of estrus. Testosterone as a medication for inhibiting lactation was used by Reilly and Solomon.[57] Only 2 per cent failures were reported. Eidelsberg and Ornstein[58] showed that the continued use of male sex hormone in doses of 25 mg. every second day over several years has maintained several individuals in an excellent state of sexual health without any untoward symptoms. Testosterone administered in a woman with painful endometriosis produced diminution of the endometrial implants and freedom from pain with symptoms of masculinization, Wilson.[59] With discontinuation of treatment the endometriosis recurred and the masculinizing effects regressed. Effective treatment of functional uterine bleeding was reported by Huffman and Bos.[60] In their opinion the effect of testosterone is produced by action on the pituitary. A marked improvement of involutional melancholia in males treated with testosterone was reported by Thomas and Hill.[61] Edwards, Hamilton and Duntley[62] used the drug in men with peripheral arteriosclerosis and thrombo-angiitis obliterans. Spectrophotometric measurements indicated that more arterial blood was flowing through the capillaries of the skin after treatment, and all patients showed improvement in walking ability and signs of intermittent claudication.

V. OVARY

Although an enormous amount of work has been done during the past year. on the effect of ovarian hormone, we must admit that many problems in the physiology of the female sex cycle remain still unsolved. The last year has seen a great number of attempts to study the fate of estrogens in the body and their effect on non-sex-specific tissues. Hoskins and Bevin[63] showed that senile male rats are markedly more active when injected with estrion glucuronide. Rosen and his coworkers[64] point to the existence of a naso-genital relationship by being able to influence the estrus cycle of the rat following treatment of the nasal mucosa. Heller[65] observed in vitro that the kidney and liver were able to inactivate estradiol, and that they increased the potency of estrone. Venning and Browne[66] demonstrated that pregnandiol can be produced from progesterone independent of the presence of an endometrium, although the latter favors its formation. The important question of the relationship of sex hormones to infection was again reviewed by Sprunt and McDearman,[67] who explained the beneficial effect of estrin on the reduction of the spread of infectious organisms as demonstrated by the Durand-Reynolds phenomenon. Von Haam and Rosenfeld[68] demonstrated a higher survival rate of mice injected with estrin and infected with Pneumococcus. Aycock[69] could enhance the resistance of immature female monkeys to intranasal installation of poliomyelitis virus by estrogenic substance. He points to the possibility of an estrogenic tissue deficiency as the cause of penetration of the virus through the nasal barrier.

DIAGNOSIS OF HYPO-OVARIAN STATES

Clinically, the diagnosis of hypo-ovarian states and its differentiation into a primary (eunuchoid) and a secondary (hypopituitary) type has been greatly facilitated by the introduction of bioassay into laboratory procedures, von Haam.[11] The measurement of urinary estrogens has been perfected to such a degree that its use by hospital laboratories has become feasible. Its assays have furnished important data concerning the etiology of amenorrhea, the diagnosis of early climacterium, and the prognosis of pregnancy. An indirect method of assay has been suggested by Beilly,[70] who recommends the determination of the vaginal pH as an index of ovarian activity. Rubenstein[71] applies the observations of Papanicolaou[72] to gynecological diagnosis in combination with the determination of rectal temperature. While both methods undoubtedly are accurate in severe cases of endocrine dyscrasias, I would hesitate to place too much significance in them for the recognition of disturbances in a still menstruating woman. Fluhmann and Murphy[73] reported the presence of estrogen in the blood of castrated women. The source and significance of this hormone remains unknown. Urine assays are recommended by Rakoff[74] for the early recognition of the toxemias of pregnancy, in which high prolan values during the later months of pregnancy were obtained. Pregnandiol determinations are now considered extremely significant for the recognition of threatened abortion, Browne, Henry and Venning.[75] A new deficiency condition of the uterus called glycopenia is emphasized by Zondek and Stein[76] as a possible cause of sterility, the ovary having insufficient nourishment during its early phase of development. The nature of the so-called bleeding factor is again discussed by Wilson and Kurzrok,[77] who suggest a possible dissociation between the estrogen effect on the endometrium and on the endometrial vessels as the cause of menstrual irregularities. The differentiation between ovulatory and anovulatory menstruation is only possible by endometrial studies, according to Corner.[78] In a very interesting and significant article Glass, Edmondson and Soll[79] point to the possibility that individuals with chronic liver diseases showed excretion of total estrogen in free form, which can be taken as a sign of failure of the liver to inactivate this hormone. The vasodilating effect of estrogens was studied by Reynolds and Foster,[80] who found a dilatation in the small vessels beyond the arterioles lasting for two hours following the injection.

In the therapeutic field Gessler and coworkers[81] report the beneficial influence of estrogenic substance on the high blood pressure of diabetic women in the menopause. According to D'Amour,[82] estrogens in oil remain potent while aqueous estrogens are not reliable. Pregneninonol was effective, according to Hamblen and coworkers[83] in functional cases of menometrorrhagia. Artificial ovulation was produced by intravenous administration of 60 units of gonadogen by Siegler and Fine.[84] Treatment of leukoplakia in the mouth by large doses of estradiol orally or parenterally was recommended by Nathanson and Weisberger.[85]

The most important therapeutic contributions refer to the effects of a new synthetic estrogen labeled "stilbestrol." Although not yet on the American market, it has been extensively studied in Germany, England and this country. For details we may refer to the recent reviews and studies published by von Haam, Hammel, Rardin and Schoene.[86,87] Here we may briefly state that it closely resembles in its effect on humans and animals the natural hormones. It is as potent orally as by injection and can be prepared much cheaper than the natural sex hormones. Because of its price the danger of overdoses is bound to be greater than with the natural hormone. Therefore still more extensive studies concerning the effect of overdoses should be conducted. At present the only common disadvantage of stilbestrol consists in an occasional incompatibility with some patients by producing gastro-intestinal symptoms. So far no specific reason has been elicited why some individuals cannot support the drug as well as others. In contrast to the natural hormones stilbestrol may be fatal to animals if given in excessive doses. Depression of the bone marrow, liver necroses, intestinal ulcerations and mucosal atrophy are the most important findings in experimental stilbestrol intoxication. In those humans to whom stilbestrol can be given it has proved an excellent means of replacement therapy. It is convenient, cheap and very effective. Doses of 0.2 mg. to 1 mg. daily are recommended, although higher ones up to 10 mg. can be supported. So far it has proven to us of inestimable value in treating menopausal and climacteric symptoms in the less fortunate individuals who cannot afford the expensive natural sex hormones and who fill the waiting-rooms of the various charity clinics with their endless complaints.

SUMMARY

The recent advances in the field of endocrinology have been reviewed. Successful separation of the various pituitary hormones, the creation of radioactive iodine, the isolation of the sodium factor in the adrenal cortex, and the exploitative investigation of stilbestrol have impressed the writer as outstanding contributions of practical importance for the medical sciences.

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Monilia Albicans (Thrush Fungus) Infection Involving the Nasal Sinuses

RUSSEL G. MEANS, M.D., COLUMBUS, OHIO

This is report of a case of Monilia Albicans, causing extensive and severe involvement of the nasal sinuses:

B. H., male, age 15, was first seen on June 13, 1940, having developed an acute rhinitis resulting in a severe sinusitis following swimming one week previously. On examination there was an abnormally profuse purulent infection involving the right nares. The pus was thin and the discharge unusually profuse so that it required continual wiping. There was swelling and tenderness over the right ethmoid and maxillary sinuses, confirmed by radiographs. General malaise was accompanied by a maximum temperature of 101; and the white blood count was 4,600 with polymorphonuclear leucocytes 65 per cent. Cultures and smears revealed Monilia Albicans (thrush), which was confirmed by several laboratories.

Treatment consisted of 1 per cent gentian violet into the sinuses, alkaline nasal and sinus irrigations, iodides intravenously, X-ray therapy, autogenous vaccine, and general supportive measures. Sulfanilamide products gave no help.

The infection gradually spread to the opposite side. Laboratory reports within a month of the onset revealed the thrush fungus had disappeared, but there remained the low-grade mixed infection, Staphylococcus aureus being the most consistently reported, others occasionally being Staphylococcus albus, hemolytic Streptococcus, and B. Friedlander. It became necessary to make small window openings into both antra via the inferior meatae. Because of the persistence of the pansinusitis reaction, causing continual blockage, a septal resection and also enlargement of the openings into the right frontal and maxillary sinuses were performed after two months. The patient's mild bronchitis and general depletion gradually improved by general as well as by persistent local measures.

Both from the literature and from replies to numerous inquiries, I ascertained that Monilia Albicans is a mold, namely yeast, known as "thrush" and is a common inhabitant of the upper respiratory tract but has not been recorded as being a primary factor in an acute invasion of the nasal sinuses. In the mouth, its low grade, persistent lesions are not infrequently encountered. Its pathogenicity is well known and frequently fatal when it involves the lower pulmonary tract. This case involving the sinuses is showing a slow but complete recovery.

Indebtedness to the following is gratefully acknowledged: Dr. Theo. E. Walsh and associates, Washington University, St. Louis, Mo.; Dr. M. M. Hargraves and associates of the Mayo Clinic; Dr. Robert F. Ridpath, Philadelphia, Pa.; Dr. Chevalier L. Jackson, Philadelphia, Pa.; Dr. Paul M. Moore, Jr., of the Cleveland Clinic; Dr. Andrew Eggston, Manhattan E. E. & T. Hospital, New York; Dr. Edward King, University of Cincinnati; Dr. Oram C. Woolpert, Bacteriology Dept., Ohio State University; Dr. Marie B. Morrow, Austin, Texas; Dr. Wm. D. Gill, San Antonio, Texas; Dr. Homer Prince, Houston, Texas; Dr. Donald S. Marin, Duke University; and Drs. Fred A. Hall, H. B. Davidson, Chas. A. Doan, R. S. Fidler, and E. W. Troutman, of Columbus, Ohio.

Corpus Luteum Hormone and Testosterone in the Treatment of Menorrhagia, Threatened Abortion and Dysmenorrhagia

DANIEL T. FEIMAN, M.D.

The Author

● Dr. Feiman, Canton, Ohio, is a graduate of University of Ilinois College of Medicine, 1932.

IN the treatment of 20 cases of menorrhagia, 13 cases responded favorably with proluton, corpus luteum hormone, and seven cases received no benefits with the above medication. All cases of menorrhagia were treated with proluton in dosages of 2 mg. seven, five and two days prior to onset of menstruation. The only cases selected for treatment were those menstruating six to ten days with cycles of 14 to 28 days and requiring 20 to 40 pads each period. The 13 cases which responded to treatment had previous periods averaging eight days, requiring the use of 23 pads. After two months of treatment the duration of flow was five days requiring the use of only 11 pads. The remaining seven cases received no benefits from treatment with progesterone even after dosage was tripled to that given to those responding to the treatment.

Testosterone "oreton" was used for these seven cases with more satisfactory results. Each patient received 5 mg. oreton, seven, five and two days prior to menstruation. The first of this group presented a history of 10-day periods with spotting for four more days. Although treatment with progesterone showed no beneficial results, testosterone reduced the duration of the period to five days. Patient II having periods of 10 days duration requiring the use of 36 to 40 pads each month responded to three injections of 10 mg. testosterone with periods of six days duration requiring 18 pads. Patients III-IV-V-VI had similar results with testosterone after progesterone had failed. Patient VII showed no benefits from the use of progesterone or testosterone. I intend to use small amounts of radium within the near future. Secondary male characteristics were not present following the use of testosterone in any of these cases.

ABORTION

In the treatment of threatened and habitual abortion my results were not as favorable as those reported by Campbell, Sevringhaus, Huber, Falls or Collins. Most of the disappointing cases were patients pregnant six to twelve weeks. Within this group I treated 10 cases, only two of which carried to full term.

Case I. Multipara 2, complaining of "spotting" six weeks after last menstrual period. This patient was not examined vaginal, however, the patient was treated as one having a miscarriage. Ten mg. of progesterone was administered immediately and the dosage was repeated eight hours later. Two mg. progesterone was administered daily during next 10 days, throughout which time the patient continued to "spot." Ten weeks after last period patient had vaginal bleeding with occasional contraction. Twenty mg. progesterone was administered during the day with 2 mg. progesterone daily for six days during the period of "spotting." At 16 weeks of pregnancy, the patient had much bleeding saturating three pads with contraction every 15 minutes, 20 mg. progesterone was given that day, and 2 mg. progesterone for the next seven days. Two mg. progesterone was given weekly for duration of pregnancy.

Case II. Patient had "spotting" four weeks after last period. This patient was treated with 10 mg. progesterone and "spotting" stopped within two hours. Eleven weeks after last period, "spotting" was present, and 10 mg. progesterone was given and this dose was repeated within eight hours. Two mg. was given daily for duration of "spotting." Patient is in her ninth month expecting delivery within the next few days.

The remaining eight cases aborted in spite of medication and bed rest. These eight cases were treated exactly as the two cases that continued to term, that is 10 mg. proluton at the first sign of "spotting" and this dose repeated later in the day. Twenty mg. proluton was given daily as long as the patient continued to "spot." Complete bed rest and morphine were given in conjunction with the above medication. These eight unsuccessful cases would tend to produce a conservative attitude regarding the results of treatment for threatened abortion by endocrine therapy. Although many cases have shown excellent results with endocrine treatment, the fact that one patient has an abortion and another continues to full term with the same therapy should give rise to careful thought. Is it not possible and probable that the location of implantation will decide the future fate of the fertilized ovum?

There are probably thousands of abortions that occur within the first six weeks of pregnancy without knowledge to patient or physician. We must assume that these abortions occur because of a low implantation of the fertilized

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The following report is submitted as a continuation of, and in addition to the cases reported in the Ohio State Medical Journal of March, 1938.

Submitted February 28, 1941.

ovum with poor possibilities of nutrition for further growth.

There is a large group of women having miscarriages that may be due to endocrine deficiency but nevertheless one must consider those patients who have miscarriages and continue to have them under all types of therapy. This group of patients should not be classified with those who lack sufficient specific hormone.

I believe that all cases of threatened abortion should have benefits of endocrine treatment until we are able to definitely identify those who have miscarriages due to poor implantation of the ovum with faulty development from those cases which are deficient in corpus luteum hormone.

AFTER THE FOURTH MONTH

Of 11 treated cases of threatened abortion that were pregnant 16 weeks or more, 10 continued to term. These cases were treated exactly as those pregnant six to ten weeks as reported above. The results in these cases were as follows:

Case I. A luetic in the seventh month of pregnancy had contractions every five minutes lasting 45 seconds. Ten mg. progesterone were given and this dose repeated within six hours. Contractions ceased within one hour and the patient continued to full term.

Case III. A nephritic went into labor seven and one-half months of pregnancy. The fetus was small and the blood pressure controlled by salt free diet, diuretics and bed rest; therefore progesterone was used in this particular case. The contractions stopped within 45 minutes after the first 10 mg. of progesterone. The patient was induced at eight and one-half months of pregnancy.

Case IV was that of a patient, seven months pregnant in labor following an automobile accident. Contractions occurred every two minutes lasting 45 seconds. Ten mg. progesterone was given and this dose repeated in two hours. Contractions stopped after two hours and the patient was delivered at term.

Case V was that of a graduate nurse in the seventh month of pregnancy. Two years previous this patient had a miscarriage in her sixth month of pregnancy. At the time I saw her the patient showed considerable "spotting" with contractions every five minutes. Progesterone stopped the "spotting" and contractions within two hours. At present patient is in her ninth month of pregnancy.

Case VI. A patient in the seventeenth week of pregnancy had spotting and contraction. Progesterone was given but in spite of medication the patient continued to abort a small macerated mass.

Cases VII-VIII-IX-X-XI were all primipara having contractions and "spotting" during the fifth, sixth, seventh, and eighth months of pregnancy. All these cases were treated with progesterone, morphine and bed rest; all continued to term.

Notwithstanding the general belief that women having a threatened abortion bear abnormal infants, I found that every fetus in this entire group carried to full term with the aid of proluton was normal in all respects.

DYSMENORRHAGIA

In the management of dysmenorrhagia, seven cases were treated. Only cases complaining of severe pains requiring bed rest were given progesterone medication. However, only two cases responded to this treatment. The five remaining cases received no benefit from progesterone treatment given in dosages of 10 mg., five days prior to onset of menstruation and 10 mg. two days prior to menstruation.

Of the five not responding to progesterone management, three had excellent results from testosterone in dosages of 10 mg. five days prior to menstruation and 25 mg. two days prior to onset of menstruation. Two patients received no benefits from either progesterone or testosterone management.

CONCLUSIONS

In the management of menorrhagia, the results proved quite satisfactory, 13 cases responding to progesterone. Of the remaining seven cases, six of these patients benefited from testosterone treatment. One case received no benefits from either progesterone or testosterone.

In cases of threatened abortion, two out of ten treated cases continued to term when abortion occurred before the sixteenth week of pregnancy. The results were far different in those cases beyond the sixteenth week, that is, 10 out of 11 treated cases responded to treatment.

In the treatment of dysmenorrhagia the results proved satisfactory, five of the seven cases responding to progesterone and testosterone therapy.

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Proluton and Oreton was employed through the courtesy of Dr. Max Gilbert of Schering Corporation, Bloomfield, New Jersey.

Postoperative Urinary Retention: Its Treatment By Instillation of Mercurochrome

FRED L. JOHNSON, M.D.

PROBABLY the most frequent postoperative complication on a gynecological ward is retention of urine. There is almost daily reminder by the nursing staff that "Mrs. A. is unable to void," "Mrs. B. is still being catheterized." Anyone who has had experience in pelvic surgery will agree that these are familiar phrases. Our routine practice is to catheterize the patient 10 to 12 hours after operation and every eight hours thereafter until she voids 100 cc. or more at one time.

Many attempts have been made in the past to reduce postoperative bladder difficulties. Curtis[1] demonstrated that it is not catheterization in itself which is primarily responsible for trouble but the distention of the bladder by a pool of residual urine in which there is opportunity for the growth of bacteria. Whatever the mechanism it has been repeatedly noted that when frequent catheterization has to be carried out the number of urinary tract infections is increased. In addition, of not little importance is the comfort of the patient. Not only is actual catheterization very uncomfortable to her but discomfort from a full bladder before being catheterized is sometimes marked. Besides it does not always require a distended bladder to cause discomfort, especially when repeated catheterizations are being carried out. Not least of all is the nursing problem. On a floor which is composed entirely of gynecological patients, the problem of frequent and repeated catheterizations is very important. Each time a patient voids postoperatively, the time taken by the nurse to care for that patient is reduced. When there are 30 or 40 patients to care for, the time saved becomes significant.

Many drugs, by mouth or hypodermically, the most popular of which is probably prostigmin have been used to promote voiding and so reduce the possibility of bladder distention. Reports of results from such medication are so variable that it is hard to judge at the present whether any are worthy of routine use.

Instillations of mild irritants into the bladder have also been used to induce voiding. Although reports of this general method are very convincing, one finds it carried out rarely as a routine. Craig[2] reported striking reduction in the number of postoperative catheterizations with instillation of mercurochrome. It was as a result of this report that we began a study of a series of cases late in 1939. Our results were so convincing that we believe the method, in spite of some objections, should be investigated and used more widely than it is at the present time.

The Author

● Dr. Johnson, Hamilton, Ontario, is a graduate of University of Toronto Faculty of Medicine, 1936; formerly assistant resident in Gynecology, Maternity Hospital, Cleveland, Ohio.

When this method was first used, mercurochrome was instilled immediately preceding the operation at the time the routine catheterization was performed. This was an attempt to simplify operating room routine as much as possible. However the difficulty arose that the patient frequently voided involuntarily before being completely out of anesthesia. Mercurochrome makes a patient void, probably, because of irritation of the trigone of the bladder and when the operation and return of the patient to her room takes too much time the instillation results in premature emptying of the bladder.

At the present time one ounce of one-half per cent aqueous solution of mercurochrome is instilled into the bladder immediately at the completion of the operation. One of the assistants remains surgically clean, cleanses the urethral orifice with alcohol, inserts the catheter, and at this time after noting that the urine is clear, instills the mercurochrome. After this is done a few times, it resolves itself into the operating room routine and causes no undue delay and little inconvenience.

The instillation has now been used on over 100 hysterectomies and other less extensive pelvic operations. The following table shows the incidence of catheterization in 100 hysterectomies before, and 100 hysterectomies after the use of mercurochrome.

Before Mercurochrome Instillation		After Mercurochrome Instillation	
Voided	Catheterized	Voided	Catheterized
20	80	76	24

It is seen that before the adoption of this method 80 per cent of patients after hysterectomy required catheterization one or more times.

Submitted January 14, 1941.

This incidence is high but with few execptions these were total hysterectomies and many of them had repair operations. The trauma to the bladder in stripping it from the cervix plus the addition of a perineorrhaphy is responsible for this very high percentage. Following the use of mercurochrome instillation, under exactly the same conditions as preceded its use, catheterization was neceessary in only 24 per cent. In this group, likewise, practically all were total hysterectomies with many perineorrhaphies and also some anterior colporrhaphies.

Of particular interest is one case operated upon August 7, 1939. At that time she had a bilateral salpingectomy and an appendectomy, a relatively small pelvic operation, and was catheterized six times postoperatively. Mercurochrome was not instilled in the bladder. This same patient was again operated on in February, 1940 and had a left oophorectomy, panhysterectomy and separation of adhesions performed. Mercurochrome was instilled in the bladder and the patient voided postoperatively and required no catheterization.

The same instillation has been used on private patients for some time and catheterization reduced to 35 per cent which is higher than in staff patients, but in proportion the same striking reduction. Private patients void less well partly because of the fact that as soon as the patient complains of discomfort an attempt is made to relieve it, and this usually consists of a catheterization, especially if the patient has a private nurse.

Shortly after the patient who has had mercurochrome instilled in her bladder arouses from the anesthesia a desire to void is experienced. She frequently voids small amounts and complains of burning two or three times in the first few hours. There is seldom any complaint of burning after 24 hours. One must be aware of these occasional early complaints as there will otherwise be needless catheterizations.

We have had no serious ill effects from the use of this drug. Gross blood was noted in the urine on three occasions but this quickly cleared up and left no discomfort or bad effect on the patient. We had no instances of pyelitis or cystitis in the hundred cases studied.

Woodruff and TeLinde[3] in a careful analysis of 500 cases report only two cases of pyelitis in their series. They have reduced the percentage of patients requiring catheterization to 6.8. This report apparently includes all types of pelvic operations and is not confined to hysterectomies as in our series. August Helmbold[4] reports 100 per cent efficiency in all cases (excepting herniotomy and hemorrhoid operations) in using mercurochrome instillations. Obviously the less trauma to the bladder and the less severe the operation the better the results will be. Woodruff and TeLinde present evidence to show the length of anesthesia and type of premedication also have an effect on the percentage of catheterizations.

Although the instillation of mercurochrome has some disadvantages, the advantages outweigh them. One disadvantage is the occasional frequency and burning for 24 hours following the operation, sometimes resulting in frequent lifting of the patient on the bed-pan. Some institutions have found the staining of the sheets by mercurochrome a serious drawback. Trials are being made with some of the colorless antiseptics to find the proper strength which will promote emptying of the bladder, not burn unduly, and do away with staining of linen.

The number of catheterizations on a patient not instilled after operation may be reduced by instilling one-half ounce of one-half per cent mercurochrome after the first catheterization, although this treatment is not apparently as effective later on as immediately after operation. After a patient has been on constant drainage for some time it is well to instill some mercurochrome into the bladder before removing the catheter. As the nursing and house-staff become accustomed to the instillation and as the routine is more strictly adhered to, the percentage of success is higher.

This instillation has been used with success in two or three vaginal hysterectomies but we believe as a rule it is better to leave an indwelling catheter in place for one week. Similarly with very extensive plastic operations on the anterior vaginal wall it is better to resort to the indwelling catheter. However, with a perineorrhaphy and less extensive anterior colporrhaphy success is obtained without catheterization in a very large percentage of cases.

There is no reason why this or some similar method should not reduce the incidence of postpartum catheterization. It is planned to obtain controlled data on this problem, with other more desirable mendicaments, both postoperatively, and postpartum.

SUMMARY

By instillation of one ounce of 0.5 per cent mercurochrome into the urinary bladder at the end of gynecological operation, catheterizations were reduced 56 per cent. Some disadvantages of the drug are outlined.

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An Evaluation of Continuous Spinal Anesthesia

J. D. SPAID, M.D.

The Author

● Dr. Spaid, Dayton, Ohio, is a graduate of Ohio State University College of Medicine, Columbus, 1922; Diplomate of the American Board of Anaesthesiology; Fellow of the American Society of Anaesthetists; Fellow of the International College of Anaesthetists; Ohio State Society of Anaesthetists; member of Senior Anaesthesia staff of Miami Valley and Good Samaritan Hospitals, Dayton, Ohio.

IN recent years there has been an ever increasing trend toward the use of spinal anesthesia. This has been due to several factors: a better physiological understanding of the mechanics of subarachnoid block, newer methods and agents, and an increase in the number of physicians interested primarily in anesthesia. Probably one of the most gratifying of the recent contributions to this form of anesthesia is the technique developed by Dr. Wm. T. Lemmon, of Philadelphia, and further studied by Dr. Morris J. Nicholson, of the Lahey Clinic. This innovation has been termed "Continuous Spinal", or "Fractional Spinal" anesthesia. The latter term is perhaps more descriptive, as the anesthetic agent is given in repeated small doses as one would administer ether, instead of by a steady drip into the spinal canal.

I have had the opportunity of using this new method in a limited number of cases with very pleasing results. To one devoting his time to anesthesia as a specialty it offers many desirable features. In our upper abdominal cases it gives promise of being invaluable. Included in this report is an anesthesia chart from a recent case. Briefly, the procedure requires four special pieces of equipment.

(1) A special mattress (Fig. 1) which is covered with rubber, and of the following dimensions: 5 inches thick, 18 inches wide and 6 feet long. Near the center it has a wedge-shaped cut out 7 inches in length, which comes under the lumbar region when the patient is supine.

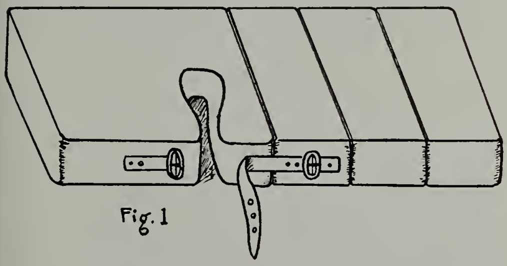


Fig. 1

(2) Special spinal neeedles of German silver alloy (Fig. 2-a) which are extremely malleable and are large enough to exert the necessary friction to keep the needle in place after the puncture has been made. These needles have Luer-lok shanks, and a Luer-lok cap (Fig. 2-b) is provided to prevent leakage of spinal fluid. Another feature of the needle is a small eyelet near the bevel to help prevent occlusion. They may be obtained in varying lengths and gauge sizes. A stilette is also provided to give added rigidity for purposes of introduction.

(3) A spinal tack, or introducer of the Sise type (Fig. 2-c), to make the puncture through the skin and superficial ligaments; which upon being withdrawn leaves a channel for insertion of the very flexible German silver needle.

(4) A very fine bore rubber tubing (Fig. 2-d) of low elasticity and 30 inches in length. This tubing has a Luer-lok connection at each end, one of which is provided with a stop-cock.

The patient is placed on his side on the special mattress with the lumbar region above the cut out portion of the mattress, and with the table in five degrees Trendelenburg position. After preparation of the field, the site for puncture is selected and a careful preliminary puncture is made with the introducer. It is important that this preliminary puncture be made as accurately as possible in order to insure proper introduction of the soft spinal needle. When the cerebrospinal fluid escapes a 10 cc. Luer-lok syringe is carefully attached to the needle and sufficient fluid to make up a 5 per cent solution of novocaine crystals is withdrawn. Usually 8 cc. of fluid is withdrawn and mixed with 400 mg. of novocaine; thus each cubic centimeter contains 50 mg. of the drug. While making up the solution the spinal needle is capped with the special

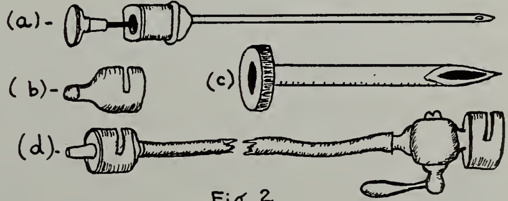


Fig. 2

Submitted January 28, 1941.

Luer-lok cap, to prevent leakage of fluid. The syringe is now connecteed to the stop-cock end of the rubber tubing and the pet-cock opened. Carefully expel all air from the tubing with the anesthetic solution. Exactly 2 cc. of fluid is required for this procedure and there remains 6 cc. in the syringe. Close the stop-cock and carefully attach the distal end of the tubing to the spinal needle. The stop-cock is again opened and a test is made to make sure that the flow is free and that the needle is still in the spinal canal. Two or three cubic centimeters, as may be required, are injected into the subarachnoid space and the stop-cock again shut off. Be absolutely sure that all connections are tight and leak proof.

The importance of securing a good puncture with an easy free flow of spinal fluid cannot be emphasized too much. One's success is largely dependent upon this factor. If the flow is not exceedingly free both to and fro, careful adjustment of the needle should be made at once. To be able to inject fluid without being able to withdraw it freely will usually cause difficulty later on.

Carefully straighten the lower extremities and with great caution gently turn the patient on his back so that the needle is in the space provided by the cut out portion of the mattress (Fig. 3). It is very important to have sufficient help in making this change of position and it is better to grasp the pelvis firmly during this manoeuver, rather than have any pull on the skin which might change the position of the needle.

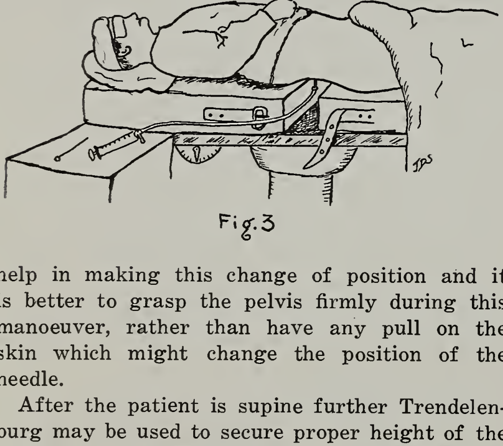


Fig. 3

After the patient is supine further Trendelenburg may be used to secure proper height of the anesthetic level. The stop-cock should again be opened and a test made to be certain that a free flow of fluid is still present. If the needle is occluded it may occasionally be necessary to slightly rotate the spinal needle, which is easily accessible through the gap in the mattress.

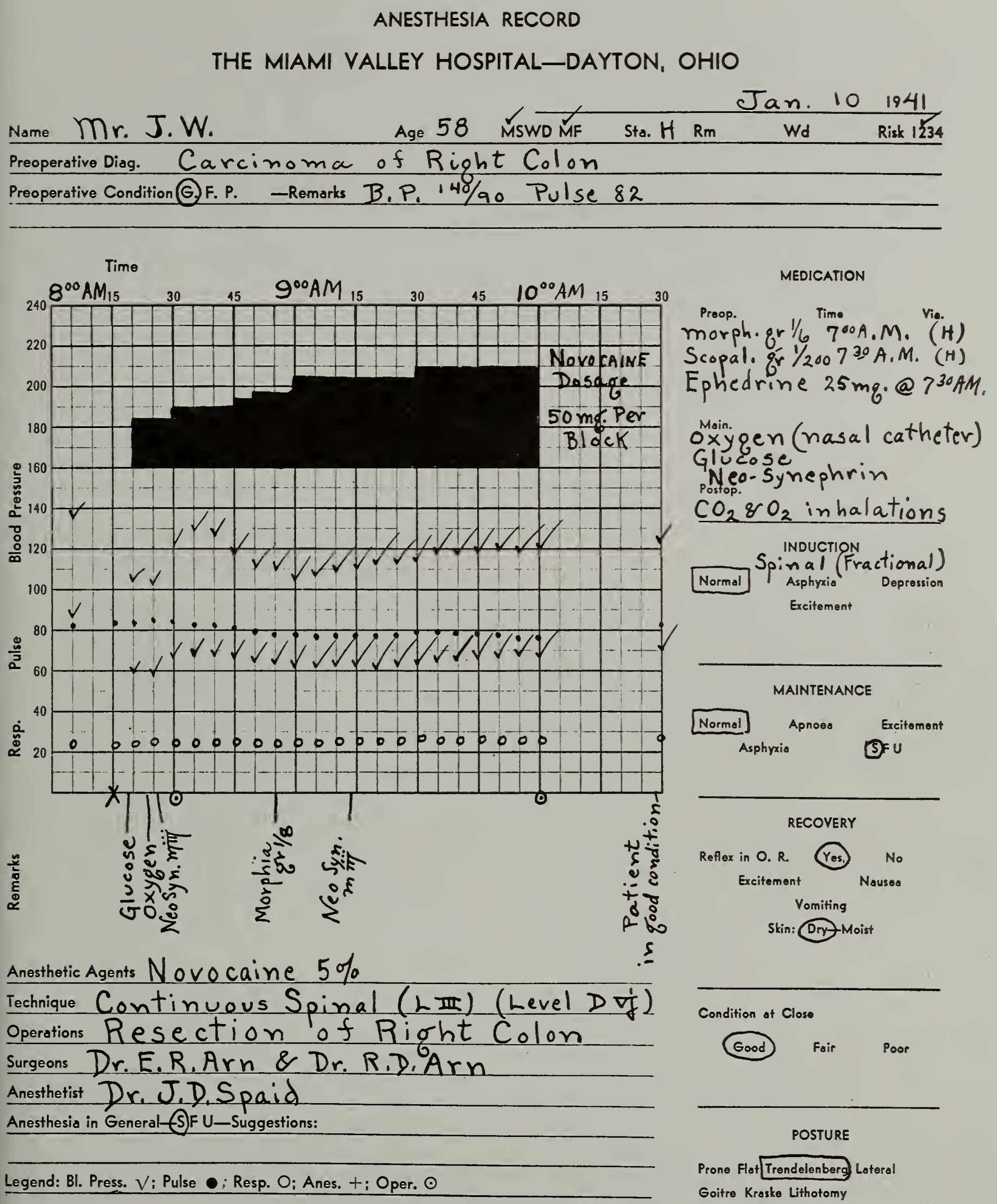
When proper anesthesia has been secured it may very easily be prolonged by injecting small increments of the anesthetic solution from the syringe; usually 25 to 50 mg. being sufficient. (See anesthetic chart). Three variable factors may be brought into play to control the anesthesia: namely, speed and force of injection, the position of the patient, and barbotage. If by any chance the patient should show an early toxic reaction the stop-cock may be opened and a great part of the dose withdrawn.

We commonly think of the anesthetic agent as rapidly becoming "fixed" in nerve tissue, but the time for fixation is not exactly known. While visiting Dr. Lemmon last December we had occasion to observe an accidental withdrawal of the anesthetic agent and to note the results. The injection had been made preparatory to a cholecystectomy, with anesthesia to the sixth dorsal. Relaxation and sensory anesthesia were excellent. Very soon after the peritoneum was opened the patient began to complain of severe pain. A hurried check was made and quickly it was discovered that the stop-cock had accidentally been opened. The cerebrospinal fluid had backed up in the syringe almost to the 10 cc. mark. The fluid was hastily reinjected and the stop-cock closed. Within 90 seconds the patient became quiet and the operation proceeded without further difficulty.

With fractional spinal anesthesia a great many advantages are obtained. No longer is it necessary for the surgeon to race against the time when the anesthetic begins to wear off. It is perfectly possible to operate under ideal conditions from one-half hour to as long as four or five hours. Sensory anesthesia may be maintained with excellent motor relaxation. Nicholson reports one case in which 1650 mg. of novocaine was used over a period of several hours for a difficult total resection of the stomach. The management of continuous spinal anesthetia is, in my opinion, much easier and safer than the Jones technique for use of nupercaine. As a matter of fact it presents only slightly more trouble than the routine spinal anesthesia.

Since novocaine is recognized by most authorities as the least toxic of the spinal anesthetic agents, we are provided with a technique for injecting small fractional doses of a relatively nontoxic agent. It is no longer necessary to determine in advance the total dose of the drug that will be required to give adequate anesthesia for a problematical length of time. We are now given a method that is comparable to inhalation anesthesia and very largely controllable. Because of the fact that the longer acting and more toxic agents can be dispensed with, the effect upon the patient is for the better. Pulse and blood pressure remain excellent. To date no cases of respiratory failure or death from the anesthetic with this method have been reported. Lemmon has had experience in over 500 cases and at the Lahey Clinic this technique has been employed well over 100 times.

Some surgeons have criticized the principle of an indwelling needle within the subarachnoid space and have mentioned the possibility of



ANESTHESIA RECORD

THE MIAMI VALLEY HOSPITAL—DAYTON, OHIO

Jan. 10 1941

Name Mr. J. W. Age 58 [✓ M]SWD [✓ M]F Sta. H Rm Wd Risk 1[✓ 2]34

Preoperative Diag. Carcinoma of Right Colon

Preoperative Condition [✓ G] F. P. —Remarks B. P. 140/90 Pulse 82

Anesthetic Agents Novocaine 5%

Technique Continuous Spinal (L III) (Level D VI)

Operations Resection of Right Colon

Surgeons Dr. E. R. Arn & Dr. R. D. Arn

Anesthetist Dr. J. D. Spaid

Anesthesia in General—[✓ S] F U—Suggestions:

Legend: Bl. Press. ✓; Pulse ●; Resp. O; Anes. +; Oper. ⊙

MEDICATION

Preop. Time Via.
morph. gr 1/6 7⁰⁰ A.M. (H)
Scopal. gr 1/200 7³⁰ A.M. (H)
Ephedrine 25 mg. @ 7³⁰ AM.

Main.
oxygen (nasal catheter)
Glucose
Neo-Synephrin

Postop.
CO_2 & O_2 inhalations

INDUCTION
Spinal (Fractional)
[✓ Normal] Asphyxia Depression
Excitement

MAINTENANCE
[✓ Normal] Apnoea Excitement
Asphyxia [✓ S] F U

RECOVERY
Reflex in O. R. [✓ Yes] No
Excitement Nausea
Vomiting
Skin: [✓ Dry] Moist

Condition at Close
[✓ Good] Fair Poor

POSTURE
Prone Flat [✓ Trendelenberg] Lateral
Goitre Kraske Lithotomy

meningitis or unfavorable neurological sequelae. Neuro-surgeons frequently open the dural sac widely and close it without the slightest untoward complication. As to post-puncture leakage, the small opening made by the spinal neeedle is not any worse than the gaps between sutures when the dura is closed during a neuro-surgical operation. Experience to date has proved these fears to be unwarranted. At the Lahey Clinic competent neurologists have followed these cases without being able to detect untoward results.

The great advantages of intermittent spinal anesthesia are obvious when one considers the number of operations that run over two hours; as long gastric resections, combined abdominal and perineal resection of the lower bowel; and in those frequent cases where it is impossible to determine whether all that can be done is take a look, or to go ahead and complete a long abdominal operation. How many times in the past has the surgeon completed a difficult common duct operation under excellent operating conditions, only to be annoyed by having great difficulty in closing the upper abdomen because of tightening muscles and descent of anesthesia? A small additional dose of novocaine just before closure greatly facilitates this important step in the operation.

This paper is presented, not as an original contribution, but rather as a missionary appeal in behalf of a technique that is meeting with enthusiastic approval of most surgeons who have had the opportunity to observe its simplicity, and work under the almost ideal anesthesia which it provides. As Dr. Frank Lahey states, "I must likewise commit myself, based upon the experience which we have had at the present time—and I have been able to observe it—that the method offers real possibilities of making spinal anesthesia an even more desirable and particularly controllable anesthesia than it already is."

104 Hadley Road

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Diabetes

A generation ago diabetes was likely to be a fairly rapidly fatal disease, particularly fatal to men rather than women and to young people rather than old. Diabetic coma and tuberculosis were the chief fatal complications; diabetic surgery was at all costs to be avoided. With knowledge of diabetes and the introduction of insulin the picture of diabetes changed. Now it is a disease more fatal to women than to men and an illness of old people rather than of the young. It is now a chronic disease with patients likely to live for long periods of time. Coma no longer is usually fatal. Tuberculosis does not develop so frequently and when it does it can be treated. The complications of vascular disease and of malignant disease are now of increasing importance.

Diabetic patients must be re-examined periodically. By recognizing complications early, surgical complications, vascular complications or the early stages of disease like cancer which may develop in the diabetic individual entirely independent of diabetes, steps may be taken to practice intelligent medicine and thus afford the diabetic as good if not better life expectancy than can be offered his non-diabetic friend.—Reginald Fitz, M.D., Boston, Mass.; Jour. Mich. S. M. S., May, 1941.

Menstrual Disorders During the Adolescent Period

A thorough history, a complete physical examination, and extended laboratory aids are necessary in diagnosing and treating the menstrual dysfunctions of adolescence.

Primary amenorrhea in a healthy girl with good pre-pubertal development may delay active treatment. However, primary amenorrhea with faulty pre-pubertal development may finally indicate active treatment. Age may be a determining factor.

Functional bleeding during the adolescent period usually corrects itself and only excessive blood loss should indicate active treatment. There is usually a failure of ovulation. The gonadotropic substances are certainly indicated as a method of treatment in this complication because they initiate ovulation, and there are those who feel that treatment should be started immediately.

Dysmenorrhea may be treated from the endocrine standpoint, but other factors must not be overlooked.

The thyroid gland extracts should not be forgotten in menstrual irregularities, even though the treatment may be empirical. This statement holds true in amenorrhea, functional bleeding and dysmenorrhea. The thyroid dosage should be guarded and controlled in part by basal metabolic rate determinations.

The anterior pituitary-like substances should be used with distinct caution because of their tendency to produce follicular atresia.

Caution should be exercised in the use of testosterone propionate because of the tendency to hirsutism and masculinization.—Ralph E. Campbell, M.D., F.A.C.S., Madison, Wisc.; Ill. M. Jr., Vol. 79, No. 6, June, 1941.

Occult Hypothyroidism

This condition does not prostrate the patient. In most cases he goes about his business of making a living. But the zest for life is obviously not in him. He wakens in the morning tired. His endurance at his work fags long before the day is done. He is too tired at night to read. He feels old with vague aches in arms and legs. He is frequently the victim of so-called migraine headaches. Gas pains beset him. Constipation is often a bitter complaint. Because frequently he has gone from doctor to doctor, been variously studied and diagnosed and X-rayed and operated upon—always without permanent relief—the unflattering suspicion dawns upon his family, his associates, often even upon himself that he belongs to the great army of the neurotic, the neurasthenic, or the nervously exhausted—whatever any of these may mean.—A. M. Schwittay, M.D., Madison, Wisc. Wisc. M.J., Vol. 40, No. 6, June, 1941.

Industrial Eye Injuries

H. V. PHELAN, M.D.

THE industrial surgeon is confronted with the same problems as a general man, except he takes care of these cases daily, instead of once a month or a year. There are so many injuries to the eye that are self evident that they will not be mentioned in this paper. The only ones I will discuss will be those which are either difficult to recognize and those in which immediate treatment is imperative in order that disability be reduced to the minimum.

We will first consider injuries to the lids as burns, lacerations, etc. Of course we all know the immediate treatment of burns to the lids, but what about the ultimate results of these burns? If on the outside or skin surface the burns frequently lead to ectopian with epiphoria and thickening of the palpebral conjunctiva, this in turn makes the eye more susceptible to infection and corneal ulceration. While from the physician's standpoint this may not look serious, it is from the patient's standpoint a very serious and uncomfortable disability. These cases have to be treated as burns in other parts of the body with the addition to treatment of an irritable and painful eye. Atropine, cold compresses, etc., are needed.

When the scar has contracted to the fullest a plastic operation is then necessary to put the lid back to its normal relationship of apposition to the eye. There are many types of operations for this condition. Your choice depends on the case. In case of burns to the inside of the lid we have the opposite or entopian to treat with the addition of symblepharon or adhesions between the bulbar and palpebral conjunctiva. These should be broken up daily or twice a day but even in spite of this symblepharon will often occur together with entopian. This condition causes a serious impairment of vision due to the rubbing of the lashes against the cornea. It can only be corrected by means of a plastic operation of which there are also many types. The correction of these conditions are remote.

The immediate treatment of trauma to the lids are lacerations, especially those that involve the lid margins. The reason for this is the marked edema that follows within 12 hours with usually one portion of the lid more edematous than the other making perfect apposition difficult if neglected. In these cases the lid margins must first be brought into perfect alignment by means of U sutures through the lid margins. Following this the rest of the wound is approximated both conjunctiva, muscles and skin. There is usually some excessive edematous tissue but it can be sutured in place. If this is done early the permanent disability is slight unless the punctae are involved. If neglected permanent disability may result from unequal unilateral ptosis or ectopian.

The Author

● Dr. Phelan, Cleveland, Ohio, is a graduate of Georgetown University School of Medicine, 1921, University of Vienna, 1924; member Cleveland Ophthalmological Club, visiting ophthalmologist, St. Alexis Hospital, Cleveland.

The cornea is most frequently the site of injury either foreign bodies, lacerations or burns. There is one thing I would like to impress on you men at this time and that is the practice that is carried on in some hospital emergency rooms, of permitting interns or residents to remove deeply embedded foreign bodies. We frequently see these cases later with massive ulceration, scarring and permanent and sometimes total blindness the result of too enthusiastic attempts to remove these foreign bodies together with no after care. A deeply embedded foreign body is no simple injury. Sometimes a permanent scar results from even the most expert removal, with some impairment of vision. The majority of these will clear up in from six to twelve months by the continued use of dionine. In case of a permanent dense scar there are two methods of approach, either strip the superficial layers of the cornea or a cornea transplant can be performed. This is done by a through and through beveled section which is replaced by a section from a healthy cornea and sutured in place. Both these operations give a fair percentage of visual improvement. I would not recommend either if vision is 6/15 or better.

Laceration through the cornea is always associated with either prolapse of the iris which becomes encarcerated or the lens is thrown forward sealing the wound causing anterior capular cataract. In either case immediate operative intervention is necessary. In the first case removal of the prolapsed iris and suturing of cornea when indicated and in the second instance the cornea alone is sutured. This is always preceded by a partial or total conjunctival flap which later is used to cover the wound. These flaps are made by making a complete or partial circumcorneal

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Read before the Industrial Section, Academy of Medicine of Cleveland, October 30, 1940.

incision about 3 to 4 mm from limbus and freeing the conjunctiva from the sclera. A purse string suture is then put in and the entire cornea covered. In case of partial flap only part of conjunctiva is freed and sutures inserted to pull it over the area of perforation.

One condition which is frequently overlooked is a dislocated lens associated with rupture of the ciliary body. This is usually caused by a blow with a blunt object. It is diagnosed by deep anterior chamber, tremulous iris, pupil is ovoid or irregular, considerable visual impairment. These cases require bed rest, atropine and bandage. The majority of these cases if properly treated causes no permanent visual impairment, but if neglected vision will remain 6/60 or less.

CASE REPORTS

I am presenting here two cases that had almost the same type of dislocation. One was treated as above and has no impairment of vision. The other was sent home from an accident room when the condition was not recognized and was not seen by an oculist until three weeks later with a vision of 6/60. In spite of treatment no improvement was obtained.

Laceration of the bulbar conjunctiva is frequently seen but what is often overlooked is an underlying laceration of the sclera associated with it. I think that in these cases unless you are positive there is no laceration of the sclera, the sclera should be exposed and investigated. There is practically no risk in doing this as the conjunctiva has to be sutured in any event. If the sclera is ruptured it should be closed with sutures and any prolapse of vitreous cut off. Conjunctival flap reinforcement covers the wound. Rupture of the sclera is not always associated with a soft eyeball, this only occurs when there is a massive prolapse of the vitreous. One of the most frequent symptoms of a ruptured sclera is severe pain out of proportion to what you see. Scleral rupture sometimes occurs on the other side of the globe from the place of force, as in contracoup fractures of the skull. Severe blows to the globe can cause avulsion of lens or iris or both together with prolapse of vitreous. The method of procedure depends on the individual case. Some need immediate operation, others it is better to wait. Under no circumstances do I recommend immediate enucleation unless there is a pronounced loss of vitreous. I am presenting a case of this type when the lens and iris were both removed and the patient still has 6/15 vision.

Traumatic cataracts are frequently seen in industry. These can develop as late as one to two years after injury. Usually they develop in from 24 hours to one week. The capsule can be ruptured either anterior most frequently or posterior. These cases are important from a compensation standpoint. Even though the cataract is removed successfully and with lenses the vision is perfect they still cannot get binocular vision. Consequently we do not put a cataract lens on these cases.

In cases of unilateral cataract in patients under 50 with no history of blunt blows it is almost invariably due to interocular foreign body either in the lens or having passed through the lens, is lodged in the vitreous or extraocular tissues. X-ray of globe and orbit should always be done. Personally I feel that X-ray of the globe should be done in all cases of the slightest suspicion of interocular foreign bodies. The point of entrance is not always visible, especially in the region of the limbus. These patients frequently have no pain and can recollect only vaguely of having a slight stinging sensation of the eye at the time of injury. Their first complaint is cloudy vision.

Rupture of the choroid and retina are not always immediately visible. They may not show up for a week after injury. When in the area of the macula or across the macula papillary bundle the first sign is marked loss of vision with no apparent cause. Later as the choroid and retina contracts the white sclera is seen with beginning pigmentation along the margins of the tears. Massive or flat detachment of the retina may occur at least six months after the injury. I am showing a case that did not show any signs of detachment for several months after the injury. These can be caused by blows in the temporal region without any apparent trauma to the globe. Retinal detachment will respond to operative intervention in about 50 per cent of cases. Atrophy of optic nerve can be caused by fracture of the anterior fossa. This can usually be diagnosed by the patient developing an ecchymosis either of lid or bulbar conjunctiva two or three days after injury. The atrophy may not be visible for some time after the trauma. Progressive constriction of the peripheral visual fields can usually be charted with perimeter. The central vision may be normal. Paralysis of the external muscles may be caused either by a blow in the temporal fossa or hemorrhage in the brain itself. These cases are always associated with diplopia in one or more visual fields. It may be permanent but is usually temporary.

There is one condition which I want to stress and that is glaucoma, which can only be diagnosed by taking the visual fields and tension. It is a frequent complication met with or without corneal ulceration and traumatic cataract. If not recognized it can cause blindness in an apparent case of simple iritis or corneal ulcer. It can usually be controlled with the usual drugs used for this condition as eserine, pilocarpine, glucosan, etc. If not, operative intervention is indicated. Of course you all know that the treatment of iritis and glaucoma are directly opposite.

In iritis we dilate the pupil while in glaucoma we constrict the pupil. So when we have a secondary glaucoma superimposed on an iritis what shall we treat? In my opinion it is better to treat the glaucoma. Frequently we have a glaucoma the result of a rapidly swelling lens in traumatic cataract. In these cases a parecentesis or opening of the anterior chamber to allow the aqueous and swollen lens matter to escape is the method of procedure. This may be repeated every second or third day in order to keep the tension down and at the same time to allow the free lens matter to be removed.

In some injuries to the head associated with fracture or hemorrhage if in the areas of the visual centers or tracts, blindness total or partial may result. This is frequently seen when there is a severe blow to the back of the skull as in the case of a blow with a block and tackle. The patient may retain perfect central vision but have markedly constricted peripheral vision as determined by the perimeter. Now these patients have just as much visual handicap and are entitled to compensation as those who have a marked diminution of central vision. This is frequently overlooked by plant surgeons. They take their vision by the Snell chart and it is found to be 6/6 or better, but they do not take their peripheral vision. Their peripheral vision may be found to be tubular. This is a very definite handicap to these patients not only in the performance of their work but also it increases the hazard to a severe or fatal injury due to the fact that they cannot see except straight ahead and are thus liable to become enmeshed in machinery. This should always be kept in mind in the case of any head injury and their fields taken before the patient is allowed to return to his occupation.

Injuries to the lacrimal apparatus is always a serious thing due to the difficulty to repair them. Lacerations through the lacrimal gland frequently in spite of all treatment results in a fistula. Those through the puncta are very resistant to repair and a persistent epiphoria results. If the canuliculla or sac are involved stricture often occurs. When the drainage of the tear sac is interfered with dacryocystitis usually is the terminal state. Sometimes minute foreign bodies become embedded in the tearways causing obstruction and secondary inflammation.

1058 Rose Bldg.

The final eradication of tuberculosis is dependent on the eradication of the foci from which it is spread, and the family of the patient with tuberculosis must be carefully studied.—J. G. Bohorfoush, M.D., and Pauline Michael, Amer. Rev. of Tuber., Oct., 1940.

Medical Problems in National Defense

At no time in our history has the necessity for the control of venereal diseases been so imperative. The needless loss of millions of days by troops during the last war because of venereal disease must not be repeated at this time. So much progress has been made in the field of venereal disease control that we now have weapons never available to us before. Principal among these is education. It must be extended and applied in every national endeavor.

The military authorities have facilities for education and extension of activities in this field; however, the sources of infection of troops are outside the military posts and, therefore, beyond the control of military authorities. This places the burden of venereal disease control squarely on our shoulders. It is a great responsibility and one in which all must participate. The health officer must assume the leadership and have the support of local physicians and the law enforcement agencies. We are not concerned with the prevention of infection only in troops but also in the skilled and unskilled workers who are so vitally important in our scheme of national defense. Therefore, venereal disease control must be a vital part of the general health program.

Every state now furnishes a free laboratory diagnostic service to all physicians. Expensive drugs for the treatment of patients are available to all doctors. In 2,887 clinics competent diagnostic and treatment service is available; in most of them, epidemiologic investigations are made to seek out the sources of infection and bring them under treatment. The private physician can render valuable service in the control of venereal disease by promptly reporting the infectious cases and, if necessary, asking for their quarantine. This will save many lost working days to our vital industries by preventing the spread of these diseases.

Prostitution must not be tolerated. It has been demonstrated that it is vitally impossible to control this problem by police and medical surveillance. The local law enforcement authorities can and must eliminate it with the cooperation of the health authorities in finding and suppressing sources of danger.—Albert E. Russell, M.D., F.A.C.P., Governors Island, N. Y. N.Y.S. Jr. of Med., Vol. 41, No. 11, June, 1941.

TUBERCULIN-TESTING PROGRAM

In a ten-year tuberculin-testing program in rural and town schools in four counties in Minnesota the percentage of reactors has fallen from 14.1 per cent to 6.75 per cent. The decrease is attributed to a careful follow-up of all positive reactors, with an intensive search for the source of the infection.

Endemic (Murine) Typhus Fever

GEORGE W. STOBER, M.D.

DIFFERENTIATING Endemic (Murine) Typhus Fever from Rocky Mountain Spotted Fever (eastern strain) is now of importance in Ohio. The first case of Typhus was reported in 1940 and Rocky Mountain Spotted Fever has been occurring yearly since 1936.

On December 19, 1940, a case of Endemic Typhus Fever was reported to the East Cleveland Health Department from Huron Road Hospital by A. G. Cummings, M.D.

This being the first proved case in Cuyahoga County and one of the first, at least proved, in Ohio, this report is being made to direct the attention of the profession to this disease.

The patient, an office worker, had not been out of Cleveland since last summer; hence the source of infection was definitely a local health problem. A blood specimen submitted to The National Institute of Health confirmed the findings of Huron Road Hospital laboratory. The first specimen submitted gave a positive Weil-Felix reaction of 1:1280.

N. H. Topping, M.D., from the Division of Infectious Diseases, United States Public Health Service, personally investigated the case from a clinical and epidemiological standpoint and confirmed the diagnosis. It was his opinion that the patient had been bitten by a rat flea whose host had found its way from the South into our area on a food truck or railroad car.

Endemic (Murine) Typhus Fever is fairly prevalent in southern cities being reported from Georgia, Maryland, Louisiana, Alabama, Tennessee, Texas, and Mexico, there being two other cases reported in Ohio, one in October, the other in December, 1940. Both were employed in a paper manufacturing plant in Hamilton County.

The Author

● **Dr. Stober, Cleveland, Ohio, is a graduate of Ohio State University College of Medicine, 1918; fellow American Medical Association, member Ohio State Medical Association.**

This type has never accounted for an epidemic in the United States because its transmission from rat, to flea, to man, instead of from man, to louse, to man, modifies the disease clinically, the louse born epidemic form having a much higher mortality rate. However, it has been suggested by Holmes[1] that the accidental inoculation by the rat flea of one human being infested with lice possibly is all that would be required to set off an epidemic in a population heavily infested with lice.

In addition to classic epidemic or louse-born typhus and sporadic cases of murine or flea-born typhus, there are several rickettsial infections characterized by a febrile course and a spotty skin eruption, transmitted by several varieties of ticks. Of these we are concerned only with Rocky Mountain Spotted Fever (eastern strain) because of the occurrence of 24 cases in Ohio since 1936.

The Weil-Felix test being nonspecific in differentiating between Rocky Mountain Spotted Fever and Typhus Fever, the following in brief, are some of the clinical and epidemiologic features of Rocky Mountain Spotted Fever and Endemic (Murine) Typhus Fever.[2] This material has been largely drawn from the work of R. E. Dyer, M.D.

Rocky Mountain Spotted Fever	Endemic Typhus Fever
1. Sudden onset with chills, headache and rising temperature.	1. Same except splitting headache and insomnia may be outstanding.
2. Daily fluctuation of temperature, often reaching 105°F.; continues for 15 to 22 days or until death.	2. Similar temperature range. Terminates by crisis between 12-14 days.
3. Macular rash appears 3-5 days after onset on the wrist and ankles, later becomes generalized, occurring on palms, soles and face. The macules, 2-6 mm. in diameter, are faint rose at first and petechial by the second week. Many become confluent and some papular. Rash persists several weeks; desquamation follows.	3. Macular rash appears 4-6 days after onset; confined to chest, abdomen, back and medial surfaces of the extremity. May become generalized but is never seen on the face and rarely on the soles and palms. The macules, 2-3 mm. rose to dark red, do not become petechial. Many are papular. Rash continues 2-9 days. No desquamation.
4. Delirium is common; hyperesthesia and tremors noted.	4. Delirium less common; hyperesthesia and tremors rare.

Submitted February 24, 1941.

Rocky Mountain Spotted Fever	Endemic Typhus Fever
5. Agglutination with proteus X19, but is absent in many cases. Agglutinins appear the second week or later. Agglutination occurs in some cases in high dilutions of over 1/1,000 or 1/10,000.	5. Agglutination with proteus X19 almost always present in high dilutions. Agglutinins appear the second week or later.
6. Occurrence in Spring, Summer and Fall months.	6. Common in Summer and Fall.
7. More common in the white race, in males and in children.	7. More common in white race, in males and adults.
8. Animals, including rodents, may act as reservoirs, but what animals have not been proved.	8. Rat is the animal reservoir.
9. Vectors are ticks D. variabilis* in the east and D. andersoni in the west.	9. Rat flea, Xenopsylla cheopis is common insect vector.
10. Transmission through bites of infected ticks.	10. Transmission by infected fleas.
11. Incubation period 4-12 days.	11. Incubation period 14 days.
12. A disease of rural areas.	12. An urban disease.
13. Case fatality rate varies from 15-70 per cent, 25 per cent being average rate.	13. Fatality rate less than 1 per cent.

Maxcy[3] says of Endemic Typhus Fever: "Few diseases present so many subjective respiratory symptoms with so few objective findings." He says 90 per cent have a hacking cough and that they raise a small amount of sputum without demonstrable pulmonary consolidation. Invariably the X-ray report is negative.

The only sure differential diagnosis between these two diseases is by the recovery of the virus in guinea pigs by intraperitoneal inoculation of the patient's blood. This should be done early in the disease.[4]

It should be mentioned, however, that in a paper of this length it is impossible to discuss the epidemiological and differential diagnostic features of Typhus Fever and Rocky Mountain Spotted Fever with any degree of completeness. There is ample literature on the subject which should be consulted by those interested in these diseases.

Typhus Fever appears to be widely distributed in the United States. Perhaps this is due to increased recognition rather than to definite extensions of previously discovered affected areas. Preventive measures include rat control, but sustained efforts to this end are expensive and difficult. Endemic Rat-Flea Typhus, therefore, becomes an important public health problem, especially in cities. Clinical recognition is equally important.[5]

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* Also called the American dog tick.—Author.

Note: In either of these diseases agglutination with Proteus X-19 is not significant in titers below 1:160. When such a reaction occurs a second examination should be made one week later.

Gallbladder Disease in the Young

Gallbladder disease, although infrequent in the young, should be included in a differential diagnosis of abdominal lesions in children. It is probable that many cases go undiscovered, a clinical diagnosis not having been made because it is such a rare condition in childhood.

Cholecystographic studies should be made more frequently in children. Surgical exploration of the biliary tract is not done often enough during the removal of a so-called interval appendix.

A case of non-calculous gangrenous cholecystitis in a four-year-old child is reported. The patient complained of abdominal pain and vomiting for three days before admission to the hospital. General tenderness of the entire abdomen especially on the right side was elicited, but no mass was palpated. Temperature 100.4. Pulse 144. Respirations 20. Leukocytes 7400, with 62 polys. Urinalysis negative. Diagnosis of acute surgical abdomen was made, and the finding of an acute appendix was expected. At operation a tense gangrenous gallbladder was found, with free peritoneal fluid and exudate around the gallbladder. No stones were found. The gallbladder was drained, a section removed for biopsy and the contents cultured. The pathologist confirmed the diagnosis and the cultures produced no growth.

The patient made an uneventful recovery and has since remained in good health.—L. Byron Ashley, M.D., and A. S. Narotzky, M.D., Detroit; Journal of the Mich. S. M. S., April, 1941.

Deep Infections in the Neck

SAMUEL IGLAUER, M.D.

IN recent years a great deal of attention has been focused on infections occurring in the deep connective tissues of the neck. These infections may occur as acute or chronic processes. In this paper only the acute forms will be considered, since they may occur as threatening emergencies which may require prompt surgical intervention. At the present time we have a better understanding of the subject as a result of anatomic research and new interpretations of the cervical fasciae and spaces of the neck.

THE CONNECTIVE TISSUE OF THE NECK

Anatomists usually describe the deep cervical fascia as consisting of three principal layers; namely, an outer investing layer which completely encircles the neck; a middle or visceral layer which encloses the various organs in the neck, including the esophagus, the trachea, and the thyroid gland; and a third or deep layer, the prevertebral fascia attached to the anterior surface of the spinal column. The carotid sheath, or nerve vessel bundle, according to most anatomists, results from a fusion of the three layers about the great vessels of the neck. A fourth layer of fascia, the "alar" fascia, lying in the frontal plane of the neck, is described by some authors.[1]

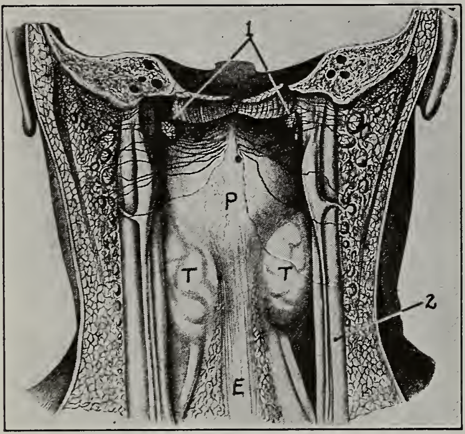

Fig. 1—Pharynx and upper esophagus viewed from behind. P—is in the true retropharyngeal space; E—is in the postesophageal space. (Note that these two spaces are continuous.) T—thyroid gland; 1—lateral retropharyngeal lymph glands; 2—neurovascular bundle. (After A. Most.)

The spaces of the neck contain loose distensible areolar connective tissue and lie between the various layers of fascia or between adjacent organs. Physiologically, the spaces permit free movement of the neck and its organs and muscles. Those anatomic spaces, prone to infection, are designated as surgical spaces and may become greatly distended in the presence of infection or when filled with air (interstitial emphysema). According to a new interpretation of the connective tissues of the neck as set forth by Weintraub,[2] the nerve-vessel bundle does not result from a fusion of fascial layers, but the bundle is in fact a nerve vessel trunk line from which branch line vessels and nerves radiate in sheets of connective tissue "like the pages from the back of a book". They are mesentery-like sheets and have the same function. "These sheets are important surgically (1) because the organs to which they go can be liberated for exposure of deeper parts, most physiologically by swinging them aside on these nerve-vessel sheets, and (2) because these sheets form in part the boundaries of many spaces of the neck" which contain loose areolar connective tissue. In addition, Weintraub finds that each neck organ (and muscle) is invested with a periorgan connective tissue layer (periorganium) comparable to the outer coat of an artery or to a tendon sheath. The periorgan tissue may consist of a single layer or may have a double layer with a space between the two layers. At times this inter-layer space assumes surgical importance, as will later be described under peripharyngeal abscess.

The Author:

● **Dr. Iglauer, Cincinnati, Ohio, is a graduate of Ohio Medical College, 1898; member American Laryngological, Rhinological and Otological Society, American Laryngological Association, American Broncho-Esophagological Association, American Academy of Ophthalmology and Otolaryngology; director of otolaryngology, Cincinnati General, Children's and Jewish Hospitals, Cincinnati; professor of otolaryngology, University of Cincinnati College of Medicine.**

PATHOLOGY

The vast majority of acute neck infections are secondary to some primary focus in the tonsils, the pharynx, the teeth, the mandible, or the middle ear. The infection may spread by way of the lymphatics or by direct extension in the form of a cellulitis or phlegmon.

The cervical lymphatics constitute an important barrier or trap against invading bacteria, as manifested by the enlargement and inflamma-

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Read before the Section on Eye, Ear, Nose and Throat, Ohio State Medical Association, Ninety-Fouth Annual Meeting, Cincinnati, May 14-16, 1940.

tion of the adjacent lymph glands in tonsillitis, quinsy, adenoiditis, diphtheria, scarlet fever, etc. As long as the infection remains confined within the lymph glands in the form of a simple lymphadenitis, it is to the advantage of the patient. Even if the glands eventually suppurate and break down, there may be sufficient inflammatory reaction about them (periadenitis) to prevent the further extension of the process. On the other hand, if the lymph nodes are overwhelmed by the virulence of the infecting organism and the glands disintegrate rapidly and discharge their contents into one of the spaces of the neck, a dangerous spreading abscess or cellulitis may ensue.

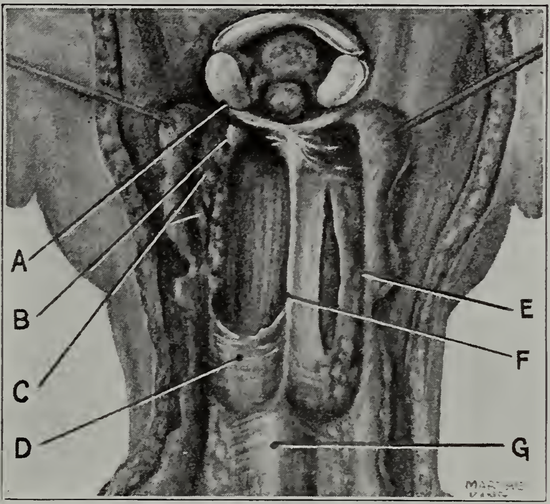

Fig. 2—Newborn infant—neck viewed from behind. A—the atlas; B—lateral retropharyngeal lymph gland; C—chain of fat; D—left peripharyngeal space laid open; E—right peripharyngeal space partially opened; F—fibrous septum between the peripharyngeal spaces; G—esophagus.

Rapidly spreading infection of the neck spaces may occur after trauma from within, particularly after perforation of the pharynx or esophagus by sharp or impacted foreign bodies, or from without after stab or gunshot wounds. A descending mediastinitis may ensue after thyroidectomy, laryngectomy, esophagotomy, and rarely after tracheotomy.

A third rather unusual route of infection appears in the form of a septic thrombophlebitis, usually involving the jugular vein or some of its tributaries.

RETROPHARYNGEAL (PERIPHARYNGEAL) ABSCESS

A retropharyngeal abscess is usually defined as a collection of pus in the areolar tissues behind the pharynx, that is, in the "retropharyngeal" space. If one examines the retropharyngeal space in the cadaver, it is quite evident that it is in direct continuity with the space behind the esophagus and that there is no anatomic barrier between these two compartments (Fig. 1).

It is, therefore, difficult to explain the localization or stabilization of a suppurative process in the retropharynx and its failure to descend into the mediastinum. I shall endeavor to explain this localization on an antomic basis after considering the etiology of such an abscess.

ETIOLOGY

Since the time of Gillette,[3] 1867, and Bokai,[4] 1876, it has been generally recognized that an abscess in the retropharynx results from the breaking down of a suppurating lymph node. These lymph glands occur in two groups, a median and a lateral group, of which the latter are clinically the more important. The lateral nodes lie on a level with the articular processes between the atlas and the axis. Typically, they are found just medial to the internal carotid artery and the superior cervical ganglion. The retropharyngeal lymph nodes receive their drainage from the nose, the nasopharynx, and the Eustachian tube.

According to Weintraub,[2] the peripharyngeal connective tissue coat (periorganium) can be separated by blunt dissection into two layers, exposing a right and a left peripharyngeal space with a vertical fibrous septum between them. Beside these paired intramural peripharyngeal spaces there is a median unpaired extramural postpharyngeal space continuous with the postesophageal space. The glands of Gillette are in intimate relation with the upper outer wall of the peripharyngeal space, and as I have endeavored to show,[5] a suppurating gland, following the path of least resistance, would tend to rupture into the adjacent peripharyngeal space, giving rise to a closed peripharyngeal abscess. This would explain the incarceration of the abscess and its failure to extend into the postvisceral compartment (Fig. 2).

Furthermore, the clinical site (Fig. 3) of the abscess and the anatomic site of the peripharyngeal space correspond. The term, "peripharyngeal" abscess would, therefore, seem to be appropriate, reserving the term, "retropharyngeal" abscess for an abscess situated in the postvisceral compartment.

SIGNS AND SYMPTOMS

Given a patient, usually an infant, having considerable difficulty in swallowing, with evidence of inspiratory retraction at the sternal notch and lower ribs, one should suspect the presence of such an abscess. Inspection may show a bulging in the posterolateral pharynx wall, and peroral palpation may reveal a tense fluctuating mass of the consistency of a tennis ball. As I have pointed out,[5] a lateral roentgenogram of the neck clearly shows the outline of the mass encroaching upon the lumen of the pharynx and larynx.

Such a picture can readily be taken without disturbing the infant. Left to itself, the abscess may extend into the parapharyngeal space or into the postvisceral compartment (Fig. 4); or it may at times cause death from asphyxia, either with or without rupture into the larynx. On rare occasions it may give rise to a fatal hemorrhage by eroding the internal carotid artery.

Nevertheless, the prognosis in these cases is excellent provided the abscess is promptly opened and drained. The ordinary acute abscess should be opened through the mouth. General anesthesia is contraindicated. The infant is placed in the hanging head position. Using the index finger as a guide, a blunt forceps is pushed through the pharynx musculature into the abscess cavity and then opened. As the contents are evacuated, the infant should be elevated by the heels to prevent any pus from entering the trachea. A chronic or "cold" abscess originating in caries of the cervical vertebrae, although producing a retropharyngeal swelling, occupies the prevertebral muscle space and should be approached by an external route to prevent contamination from the flora of the mouth.

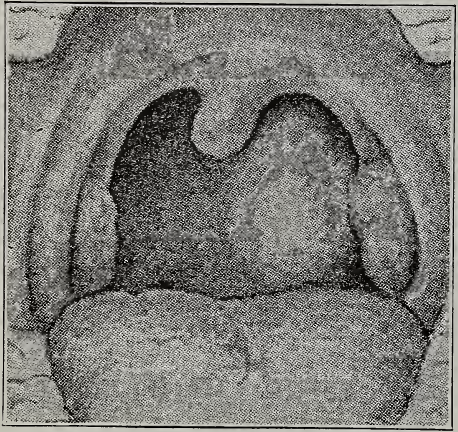

Fig. 3—Retropharyngeal abscess. (From Lederer's "Diseases of the Ear, Nose and Throat," F. A. Davis Co., 1938.)

INFECTION OF THE POSTVISCERAL SPACE MEDIASTINITIS

The postvisceral space (Fig. 1) lies behind the pharynx and esphagus and contains an extensive loose network of areolar tissue. The posterior limits of the space are formed by the vertebral column with its attached muscles and ligaments and their connective tissue coverings. In the neck the neurovascular bundle forms the lateral limits. Inferiorly, the space is continuous with the posterior mediastinum. According to Pearse,[6] "The retrovisceral space is the route traversed by pus in 71 per cent of cases of mediastinitis from cervical suppuration."

Infection of this space may result from the presence of impacted or sharp foreign bodies in the pharynx or esophagus, from perforation or rupture of the esophagus, or from bullet or stab wounds. It may also occur by gravitation from some adjacent infected compartment such as the peripharyngeal or parapharyngeal space (Fig. 4).

The symptoms are those of extreme dysphagia, prostration, fever, pain, with tenderness and swelling at the root of the neck.

Perforation of the esophagus is usually accompanied by interstitial emphysema due to the escape of air into the periesophageal tissues or to gas-forming bacteria (Myerson).[7] X-ray examination may demonstrate the presence of air bubbles in the tissues even before they have become palpable at the root of the neck, thus enabling the surgeon to establish an early diagnosis.[8] The roentgenogram also reveals the marked swelling of the tissues behind the esophagus, pushing the esophagus and trachea away from the spinal column. Esophagoscopy may reveal the site of perforation, as well as the area of greatest swelling.

TREATMENT

With increasing pain, fever, and swelling, together with signs of emphysema, as a rule the only hope of saving the patient is by cervical mediastinotomy or, possibly, by an internal esophagotomy. The cervical approach, as described by Von Hacker[9] and Marschik,[10] and as elaborated by Pearse,[6] consists of an incision along the internal border of the sternocleidomastoid muscle, followed by lateral retraction of the carotid sheath and medical retraction of the strap muscles and thyroid gland. The middle thyroid vein and inferior thyroid artery may require ligation. By blunt dissection the esophagus is approached and then pulled forward, exposing the postvisceral compartment. A gauze dam is then placed below the abscess to prevent gravitation into the posterior mediastinum. Postoperative drainage with suction through the drainage tube (soft rubber) should then be instituted.

PARAPHARYNGEAL INFECTION

The space lateral to the pharynx, the parapharyngeal space, is sometimes designated as the pharyngomaxillary fossa, although the term, "pharyngo-mandibular", would be more accurate. On cross section at the tonsil level the space is triangular in outline. The mesial wall is formed by the superior constrictor muscle; the anterolateral wall is formed by the ramus of the mandible, the internal pterygoid muscle, and the parotid gland; the posterior boundary is formed by the transverse processes of the upper cervical vertebrae, together with their muscular and connective tissue coverings. The superior limit of the space is formed by the base of the temporal bone, and inferiorly it terminates at the fused fascia.[6]

The styloid process, with the muscles attached thereto, divides the space into a pre-styloid and a retro-styloid compartment. The space contains areolar connective tissue, fat, and lymphatics. The upper portion of the neurovascular bundle extends vertically through the posterior compartment. Roughly speaking, the parapharyngeal space may be likened to an upright funnel situated lateral to the pharynx.

Pathology. Owing to the close proximity to the tonsil, infection in or about the latter structure may extend into the parapharyngeal space after traversing the superior constrictor muscle and its connective tissue covering. Thus, a peritonsillar or retrotonsillar abscess may invade the space by direct extension. More rarely, the infection may be carried by the tonsillar veins (Frankel).[11] Infection may also occur after tonsillectomy under local anesthesia, the infection having been introduced by the needle or after operative injury to the constrictor muscle. Dental nerve blocking in this area may also introduce infectious material. Finally, a retropharyngeal or a peripharyngeal abscess may rupture into the space, or it may be invaded by a backward extension of suppuration in the floor of the mouth (Ludwig's angina).

Signs and Symptoms. There is usually considerable external swelling and tenderness immediately behind and below the angle of the jaw. Fluctuation may be absent, but sometimes it can be elicited on bimanual palpation with one finger in the pharynx and the other applied externally. The tonsil bed, together with the tonsil, is displaced toward the mid-line. There is marked trismus due to splinting of the internal pterygoid muscle. Dysphagia, fever, and signs of general infection are present.

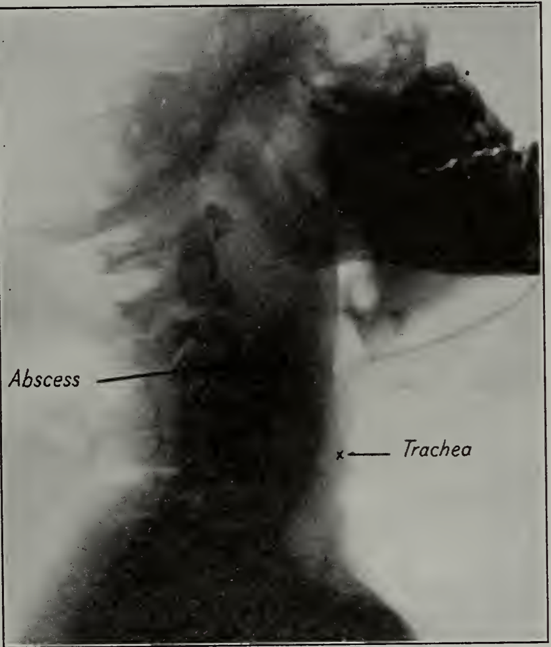

Fig. 4—Lateral roentgenogram of a boy, aged 8 years. Unusually large retropharyngeal abscess extending into the posterior mediastinum behind the esophagus; internal and external drainage. Recovery.

Diagnosis. The diagnosis is made from the history and the local findings. In the differential diagnosis a simple lymphadenitis must be excluded.

Treatment. An external approach is usually indicated. As shown by Batson,[12] a small incision behind the angle of the jaw may suffice. The incision should be made between the lower pole of the parotid gland and the posterior margin of the submaxillary gland. Through this incision a curved hemostat may be introduced hugging the internal aspect of the body of the mandible (internal pterygoid muscle) and reaching the abscess by blunt dissection. At other times it may be necessary to expose the submaxillary gland, and after lifting it upward, to approach the abscess under direct vision, as described by Mosher.[13] If pus is not encountered, the tonsil on the affected side should be removed. In some cases it may be advisable to remove the tonsil before making the external incision. An internal blunt approach through the tonsil bed may suffice in those cases secondary to tonsillectomy.

LUDWIG'S ANGINA (SUPRAHYOID PHLEGMON)

Ludwig published the first description of this disease in 1836. The term "Ludwig's angina", has been used rather indiscriminately to describe various forms of cellulitis in the mouth and neck. The term should be limited to a celluitis or phlegmon originating in the floor of the mouth or within the fascial capsule of the submaxillary gland and invading the suprahyoid region or compartment. This compartment is bounded laterally by the horizontal rami of the jaw and inferiorly by the hyoid bone. The floor of the compartment is formed chiefly by the two mylohoid muscles which arise from the body of the hyoid bone and the mylohyoid ridges of the mandible on each side. The two muscles meet in the midline to form the mylohyoid diaphragm, the true floor of the mouth. Externally, under the skin, the first layer of the deep fascia forms a firm cover for the compartment. The submaxillary glands are situated in the posterolateral portion of the compartment. Usually the phlegmon or abscess lies below the mylohyoid diaphragm, but occasionally it rests upon the diaphragm, giving rise to a sublingual abscess. If the process extends backward, it may involve the pharynx and the structures at the root of the tongue where it may cause edema of the vestibule of the larynx. In Ludwig's angina, the primary focus of infection is usually found in a carious tooth (lower molar) or in an ulcer in the floor of the mouth. Some cases originate in the areolar tissue surrounding the submaxillary gland.

The exciting organism usually belongs to the streptococcus group. Staphylococci and colon bacilli have also been cultured from the incisions.

Symptoms. The onset and progress of this disease is rapid. There is usually a chill followed by high fever. There is extreme prostration and marked dysphagia. Dyspnea ensues with laryngeal involvement or tracheal compression. The tissues between the jaw and the hyoid bone are markedly swollen, are of board-like consistency, and are extremely tender. Fluctuation is usually absent. The mucosa in the floor of the mouth is swollen and edematous. The tongue is pushed upward, and the frenulum is pressed against the lower incisor teeth. Owing to trismus, the patient may not be able to move the lower jaw, rendering examination of the pharynx and larynx very difficult.

The progress of the disease is very rapid unless relieved by operation. On rare occasions the abscess may rupture spontaneously, usually into the pharynx. The untreated patient usually succumbs to either septicemia or asphyxia in a very short time.

Treatment. Prompt incision is indicated. One should not wait for fluctuation. Owing to the danger of respiratory obstruction, local anesthesia is preferable to inhalation anesthesia. The first free incision should be made over the most prominent area of swelling. Several incisions are frequently necessary—one in the mid-line from the hyoid bone to the chin, piercing the platysma and investing fascia and extending by blunt dissection to or through the mylohyoid diaphragm. As the conditions demand, additional incisions are often necessary and should be made parallel to and a finger's breadth within the lower border of the mandible, avoiding the facial artery and the submaxillary gland. Lejars[14] advises similar incisions and multiple punctures with the thermocautery. Ashurst[15] advocated a through and through incision, piercing the mucosa as well as the skin. The incisions may fail to expose distinct pus collections, and usually reveal infiltrated and necrotic, foul-smelling cellular tissues. Rubber drains or cigarette drains should be inserted. If the offending tooth is still present, it should be extracted. With signs of respiratory obstruction, tracheotomy should not be deferred. In addition to supportive treatment, intravenous glucose injections, antistreptococcic serum and blood transfusion and chemotherapy are often indicated.

SEPTIC THROMBOPHLEBITIS OF THE CERVICAL VEINS

The possibility of a septicemia complicating a sore throat has been recognized by clinicians for many years. Some of the cases have been described under the title of streptococcus sore throat, but postanginal sepsis is a more accurate term.

In recent years a great deal of attention has been given to the pathology and surgical treatment of this condition. Fraenkel[11] was of the opinion that a primary thrombosis took place in the tonsillar veins and that the process then extended through the posterior and common facial veins into the internal jugular. According to Uffenorde,[16] the lymph channels and lymph glands are primarily infected, and the veins become involved from contact with the lymphatics. At the present time most pathologists (Waldapfel,[17] Joel,[18] and others) agree that a cellulitis or abscess in the parapharyngeal space causing a periphlebitis and an endophlebitis account for the thrombosis in most instances.

The usual history obtained is that several days (or weeks) after a tonsillitis or quinsy the patient develops high fever, repeated chills, sweats, and a high leukocyte count. Tenderness at the angle of the jaw is a constant sign, and a swelling may appear in the same region. There may be tenderness and some induration along the course of the internal jugular vein. The tonsillar inflammation may have completely subsided, but a discharging fistula from a peritonsillar abscess may still be present. The tonsil and lateral pharynx wall on the affected side may be somewhat displaced toward the median line. Later in the disease there may be signs of pleurisy or minute emboli in the lungs.

Without surgical intervention, these cases usually terminate fatally. Claus,[19] who has had the greatest experience with these cases, has reported operations on 43 cases; 20 of these (46 per cent) succumbed to the disease.

The operation, under local anesthesia, consists in opening and draining the parapharyngeal space through an external incision, with exposure of the internal jugular, common facial, and posterior facial veins. If the veins are found to be thrombosed or collapsed, they should be ligated and removed, and the exploration should be carried as near the tonsil bed as possible. It may be necessary to sever the posterior belly of the digastric and the stylohyoid muscle in order to reach the primary source of infection. The tonsil on the affected side should then be removed.

707 Race St.

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NOTE—Additional bibliography, omitted because of lack of space, will be included in reprints.

Preparation of a Slowly Absorbed Pollen Antigen
A Preliminary Report

GEORGE E. ROCKWELL, M.A., M.D.

ALTHOUGH the prevention and treatment of hay fever, by the injection of pollen extract in gradually increasing doses, is satisfactory, it requires many injections and is fraught with the danger of general reactions. Investigators, to obviate these difficulties, have employed alum-precipitated pollen antigen,[1] pollen antigen emulsions in oil,[2] or pollen antigens in gelatin. If a relatively insoluble pollen antigen without the presence of any foreign irritating substance can be prepared, it would be more slowly absorbed and would thus be less likely to give systemic reactions. It should also stimulate a greater immune response. Such an antigen can be prepared from low and high ragweed pollen as follows:

Ten gm. of defatted pollen is extracted in 100 ml. of saline solution containing N/100 NaOH for 48 hours or longer. After extraction it is filtered and sufficient concentrated HCl is added to give maximum precipitation (approximately 6 to 7 ml. to each 100 ml. of the filtrate). This is mixed and allowed to stand for 3 to 48 hours in the ice-box during which time a flocculent precipitate (hydrochloride or double salt) forms. This precipitate is then collected by centrifugalization. The yield of the caked, but not dried, precipitate is approximately 0.2 gm. for each original gm. of pollen. Sterile saline (100 ml. to each 2 gm. of precipitate) is added. This pollen antigen suspension is then ground in a sterile porcelain ball mill or by mortar and pestle until it is uniform and will flow freely through a 27-guage needle. The reaction is adjusted to pH 6.5 and the nitrogen content determined. Aqueous Merthiolate (Sodium Ethyl Mercuri Thiosalicylate, Lilly) solution 1:1000 (pH adjusted to 6.5) and sterile saline are then added to give a final concentration of 0.192 mg. of nitrogen and 1:10,000 Merthiolate. Cultures are then made for sterility.

If desired, NaCl can be added (20 gm. to each 100 ml. of filtrate) to aid precipitation. The sulfate or the nitrate of the pollen antigen can be made instead of the chloride. The pollen antigen, being amphoteric, is a weak base and hence forms salts with strong acids more easily than with weak acids. Also, alkaline and double salts can be formed. These, with exceptions, are soluble.

With minor adjustments, the method described above can be used in the preparation of a relatively insoluble antigen from the grass pollens.

The Author

● Dr. Rockwell, Cincinnati, Ohio, is a graduate of the University of Cincinnati College of Medicine, 1923; member American Bacteriological Society, fellow Association for Advancement of Science, Ohio Regional Allergic Society; attending physician, medical staff, Bethesda Hospital, Cincinnati.

The pollen antigen as thus prepared contains the equivalent of 30,000 Noon units (as determined by intradermal tests) or 19,200 nitrogen units per ml. Its solubility is slightly in excess of 100 units per ml., providing the pH is less than 7.5. Such a pollen antigen has been kept in the ice-box for several years with definitely no more and apparently less loss than occurs in the case of the conventional extracts. It is invariably sterile, due to the high concentration of HCl used in its preparation. That such a high concentration of acid (when kept cold and not unduly exposed to air) does not even partially destroy the activity of the antigen is shown by the fact that the precipitated pollen antigen (if put into solution) will give skin reactions in as high a dilution as a control extract with the same protein nitrogen content. Also, all of the original potency of the pollen extract can be accounted for in the precipitated antigen and in the antigen remaining in the filtrate.

That the precipitated pollen antigen, as so prepared, is the essential antigen is shown by (a) if the filtrate is neutralized and then diluted to 100 times its original volume it should contain, if no pollen antigen has been removed, 1000 Noon units per ml. However, when tested intradermally on ragweed sensitive persons, it gives approximately the same reaction as a control extract containing 100 units per ml. Thus it is seen that the filtrate contains approximately 10 per cent, and the precipitated antigen 90 per cent of the potency of the original extract. (b) If the filtrate is neutralized and used for the preseasonal treatment of hay fever cases the results are most unsatisfactory. Attempts to immunize rabbits with it result in little or no immune response. These facts suggest that the reactive factors remaining in the filtrate are mainly of the hapten type (partial antigens).

Intradermal tests made on more than 50 ragweed sensitive cases with the relatively insoluble

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Submitted May 6, 1941.

pollen antigen, prepared as herein described, showed all to be skin-reactive. In a series of hay fever cases treated with this antigen all had as much or more relief from symptoms than did a control series receiving the conventional extract. The dosage used is shown in table 1. From this table it is seen that it was necessary to use only about one-half the number of build-up doses which were required by the conventional extract.

TABLE I

Dosage Schedule for Slow Pollen Antigen

Dose	Amt. in ml.	Units
	1,000 units per ml.	
1	1/20	50
2	1/10	100
3	2/10	200
	3,000 units per ml.	
4	1/10	300
5	3/20	450
6	2/10	600
7	3/10	900
8	4/10	1,200
	30,000 units per ml.	
9	1/20	1,500
10	1/10	3,000
11	3/20	4,500
12	2/10	6,000
13	5/20	7,500
14	3/10	9,000
15	4/10	12,000

SUMMARY AND CONCLUSIONS

1. The preparation of a relatively insoluble and therefore a slowly absorbed pollen antigen is described.

2. This antigen is a salt of the active pollen substances. Thus, it contains no foreign matter such as oil, alum, or gelatin.

3. Because of the slow absorption of this antigen it is less likely to give systemic reactions and therefore permits more rapid increase in dosage.

4. Clinical results in a series of hay fever cases treated with the slowly absorbed pollen antigen were as good as those obtained in a control series treated with glycerine extracts.

5. The evident benefits of this slowly absorbed pollen antigen warrant further studies during the coming season.

All subsequent doses are the same as dose number 15.

The interval between injections is approximately five days.

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Medicine and National Preparedness

Medicine in these days of national preparedness is acutely aware of the necessity of keeping workers fit for industry. The prevention of industrial disease is most important, especially regarding those affecting the skin, for they comprise at least 60 per cent of all occupational disorders.

Industrial dermatoses are those pathological conditions of the skin caused by occupation, and ranging from simple discoloration of the skin to carcinoma. Occupational dermatitis (ergodermatitis) is an inflammatory disease of the skin caused by irritants contacted at work.

Diagnosis of skin ailments often requires a history of the individual case to determine the offending irritant. Patch tests are useful where a minute amount of the suspected substance is kept for a time in contact with the skin. Treatment usually requires the sufferer to leave his work for a time. If a severe case, he should be sent to a hospital. Various dressings and solutions have been found useful, but prevention is far more important than any cure.

Prevention involves widespread education. Industry must be educated to avoid, where possible, the use of harmful chemicals. The worker must be educated to be careful, particularly in cleansing operations, for most skin disorders are due to carelessness. The medical profession must also be educated to the seriousness of the situation, and so must State Legislatures so that they can provide suitably for the worker's welfare and for his compensation while disabled.—J. G. Downing, M.D., Boston; Jour. Mich. S. M. S., April, 1941.

SPREAD OF TUBERCULOSIS

Tuberculosis, like all plagues, spreads most dangerously in the close contacts of the family. Resistance breaks down before a mass attack, and the steady bombardment of each other by husbands and wives, parents and children, brothers and sisters is the best of all mechanism for perpetuating the disease. People exposed to tuberculosis in their own homes are, roughly, ten times as likely to fall sick of it as are people in the population at large.—"Plague On Us" by Geddes Smith, Commonwealth Fund, 1941.

Electro-Shock Therapy

A Reportorial Review

JOSEPH L. FETTERMAN, M.D.

At the ninety-seventh annual meeting of the American Psychiatric Association, held in Richmond, Virginia, May 5-9, 1941, considerable attention was devoted to the new method of treating certain types of mental disease by inducing coma and convulsions through electricity. There were a round table discussion, several exhibits, and a cinema, as well as a complete session given over to this subject.

The electro-shock method is a step forward in the therapeutic use of coma and convulsions for the relief of mental diseases. In principle and results, the electrical method resembles metrazol, but there is a basic difference in technique.

At the round table discussion, Dr. L. Kalinowsky gave a brief historical outline of the electrical method. He mentioned the earliest use, by Hitzig in 1870, of electricity as a means of stimulation of the exposed cortex in animals, then reviewed electrical stimulation of the head in both animals and man for experimental purposes, and finally discussed its planned application in the treatment of human beings by Cerletti and Bini in 1938. Undoubtedly the use of the electro-coma method in human beings was inspired by the previous success with insulin and metrazol.

Dr. E. A. Strecker of Philadelphia reported certain clinical aspects and summarized the experiences of a group of psychiatrists of his city. Then Dr. F. G. Ebaugh discussed the results of this treatment in Denver. Dr. Douglas Goldman of Cincinnati reported the use of this method for inmates of a state hospital, while Dr. A. Myerson of Boston described the ambulatory treatment of some fifty private patients. Many other neuropsychiatrists participated in the general discussion that followed, including comments by Drs. Lloyd Ziegler, V. Gonda, N. J. Berkwitz, J. L. Fetterman, S. B. Wortis, and others.

At a later session, there were several significant papers. Dr. L. H. Smith reported the experiences of himself and coworkers (J. Hughes, B. J. Alpers, and D. W. Hastings), presenting a rather detailed paper on the results of treatment in 156 patients. This was followed by Dr. Myerson's clinical report on "The Out-Patient Electric Shock Treatment of Manic-Depressive Psychoses". Then a paper on the psychologic return of function after treatment was read by Drs. H. Lowenbach and E. J. Stainbrook. Drs. L. Kalinowsky and W. A. Horwitz described the "petit mal response" and compared its therapeutic efficacy with that of grand mal reactions.

The technique of electro-shock therapy was similar in the hands of the various workers. The apparatus employed is modeled after the original description of Cerletti and Bini. As a rule, an alternating current delivering a voltage of between 80 and 200 volts and a milliamperage of between 200 and 700 is applied for a time interval of 0.1 to 0.5 of a second. Obviously the apparatus permits a wider range so that in an individual treatment, the specific dosage may be varied as to time, voltage, and milliamperage. The patient is usually placed upon a table or a firm bed, electrodes are applied to the forehead and the current administered. Such "treatments" are given two to three times a week in a series of six to twelve coma reactions. The number of and the time interval between treatments is decided by the psychiatrist according to the response of the patient.

The typical reaction of the patient is as follows: **Consciousness is instantaneously lost.** The response is minor (petit mal) or major (grand mal). If minor, there is a "startle" reaction of stiffness, some twitching of the face, and a prompt awakening from the unconsciousness. If the reaction is major, the unconsciousness is accompanied by a tonic phase of marked rigidity followed by severe clonic movements resembling an epileptic convulsion. This convulsive period lasts from 30 to 60 seconds during which the patient becomes cyanotic. The convulsion is succeeded by breathing, relaxation, and a return of the color to normal. The pulse is little changed, the blood pressure is somewhat elevated during this period. Then there is a post-convulsive stupor lasting a varying interval, from which the patient slowly awakens in a dazed, somewhat bewildered manner. For one-half hour to one hour following the application of electricity the patient either sleeps or looks somewhat blankly about, only gradually regaining a complete orientation of himself and his environment. It is remarkable that the majority of patients then return to complete wakefulness, quite free of distressing complications. A few have muscular soreness. At times there are fracture complications and frequently a memory disturbance. Fortunately this amnesia, which is marked at first in some instances, is not permanent. Many

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From the Department of Medicine (Neuropsychiatry), Lakeside Hospital, and the School of Medicine, Western Reserve University.

patients have a transitory, "spotty" memory disturbance for days, rarely for weeks.

RESULTS

The results of treatment have been, in the main, highly satisfactory. The severe melancholias and both phases of manic-depressive psychosis have responded well to a series of electrical treatments. The consensus of opinion was that this method had a remarkable therapeutic value in the affective illnesses. As regards schizophrenia, the majority of those who participated in the program believed that this method might bring about an improvement in the early cases, but there was considerable doubt about its permanent value in the more chronic cases. However, several psychiatrists had had experiences such as my own in which a patient with schizophrenia of five and a half years' standing "recovered" after a series of 12 such treatments. The complications have been decidedly less than those with the previous shock methods. Fractures occur, but the percentage and severity are much less than with metrazol. No death due to electroshock therapy was reported. The neuropathologic studies of laboratory animals have shown brain changes and the electro-encephalographic studies of human beings have revealed temporary abnormalities. None of the workers reported neurologic evidence of permanent brain damage or pathological findings in the spinal fluid of treated patients.

INTERPRETATION

My personal experience is consistent with that reported at this meeting. The electrical method represents a remarkable stride forward in the treatment of certain psychoses. The freedom from discomfort is such that most patients accept the treatment willingly. The complications have been remarkably few, especially when one considers the serious diseases for which these methods are used.

The experience at hand indicates that the chemical and electrical changes induced in the brain by the coma and convulsive method are capable of altering the course of certain disease processes. The severe depressions may be so modified that the mood is changed from melancholia to normal or to exuberance. Some patients with schizophrenia have responded well, but unfortunately certain types of schizophrenia present the downward course of malignant psychic disease. Neither the electrical method nor previous shock therapies have succeeded in altering this course. One may summarize the experiences to date with the remark that the electrocoma method promises to be a most valuable addition to psychiatric therapy.

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Urethral Diverticula

Urethral diverticula and cul-de-sacs are anomalies of development and by no means as rare as authorities would lead us to believe. They give rise to no inconvenience under normal conditions and are only accidentally discovered while examining the urethra for other affections.

Two forms exist: (1) the diverticulum—a short, linear, narrow, collapsible pocket opening into the urethra, and (2) the cul-de-sac proper—a larger, longer and more distended pouch, stopping abruptly, or rather terminating blindly into the submuscosa of the urethra.

Symptoms: They give rise to little discomfort; but when once the seat of inflammatory processes, they may prove annoying and rebellious to treatment. They produce vague symptoms, simulating a mild case of urethritis and may prove the cause of a prolonged urethral discharge. Microscopically, nothing of importance is revealed. Urinary tenesmus may be pointed out as an occasional symptom. Should they become implicated in a Neisserian process, they may serve as starting points of stricture formation, particularly that of the longitudinal type.

The treatment of these anomalies is simple. The urethroscope is of paramount aid in their detection. With the latter in situ, the lacunar folds may be slit open with a small knife or urethrotome. Local anesthesia usually suffices. This must immediately be followed by insertion of sounds in ascending sizes, until the largest can comfortably pass the distal end of the lacunae and left in situ 10 minutes each time. This must be repeated several times in order to prevent the too premature closure or healing of the divided edges. The lateral bands ultimately atrophy at a level of the urethral mucuso, which may readily be ascertained urethroscopically.—Noah E. Aronstam, M.D., Detroit; Jour. Mich. S. M. S., May, 1941.

Sympathetic Ophthalmia

Though rare, sympathetic ophthalmia is so serious that all cases should be reported. A case is described in which a complete cure was obtained in the uninjured eye by the standard treatment of typhoid vaccine fever therapy, salicylates, local heat and atropine. Recent literature on this disease is concisely reviewed, giving the general practitioner a brief review of the frequency, pathology and clinical symptoms of the condition. The etiology is discussed in more detail, but the cause of the condition is not yet proved. The most important therapeutic measure is prevention, and the most definite is early enucleation of the injured eye, but this radical step often is not justified. The prognosis is serious, but better under intensive therapy than is generally believed.—Don Marshall, M.D., Kalamazoo, Mich.; Jour. Mich. S. M. S., May, 1941.

Syphilitic Aortitis With Occlusion of Right Coronary and Large Neck Vessels

HERBERT S. REICHLE, M.D.

A COLORED female, 52 years old, entered the hospital on the service of Dr. E. E. Beard with a history of paroxysmal dyspnea and a sense of mediastinal oppression and boring pain over the precordial region since six months. Lately a cough with a moderate expectoration of mucinous material, fever, pedal edema and night sweats had set in. There had been one pregnancy which terminated in a miscarriage at four months.

The physical examination revealed an obviously ill, emaciated patient who was quite orthopneic. The heart was enlarged to the anterior axillary line and there was widening of the supracardiac dullness but no tracheal tug. Both a systolic and a diastolic murmur were heard, loudest over the aortic area but also over the apex. The pulse rate was 100 and was regular, the respirations 26 and the temperature 38°C. There was a marked discrepancy in the blood pressures of the arms; on the right it was 90/70 and on the left 162/20. The pupils reacted sluggishly to light but the ocular fundi showed no disease. The reflexes showed no abnormalities. Evidences of cardiovascular failure were present: pitting edema of the lower extremities, rales at the bases of the lungs, a large tender liver. There was an anemia, the erythrocytic count being 3,900,000 and the hemoglobin 73 per cent. The leucocytes were only slightly increased in number (10,500). The urine showed no essential abnormalities. The blood Wassermann was four plus positive but the spinal fluid Wassermann was negative. The examination of the spinal fluid revealed nothing of importance. The electrocardiogram showed low voltage of the T wave in all leads and a low q.r.s. in lead III, which findings were regarded as indicative of myocardial disease. The examination by the roentgenologist revealed a cardiac shadow measuring 15 cm. in contrast to the greatest diameter of the chest of 25 cm. The configuration was aortic and in the oblique position the left ventricle was seen to overlap the thoracic spine. The conclusions drawn were: cardiac hypertrophy particularly of the left ventricle.

The therapy consisted of a restricted fluid diet, digitalis and ammonium chloride. After tempory improvement the congestive failure increased in degree. On the day of admission there had been a brief attack of unconsciousness and on the seventh day the patient suddenly became comatose and after return to consciousness exhibited a left-sided hemiplegia. Her decline was rapid and death occurred on the sixteenth day. The final clinical diagnosis was: Syphilitic heart disease with aortic insufficiency and cardiac hypertrophy and dilatation, myocardial insufficiency, syphilitic aortitis with endarteritis involving innominate and left carotid arteries.

At autopsy a severe syphilitic aortitis involving the entire thoracic aorta was found. There was a diffuse dilatation of moderate degree but no aneurysm. The aortitis had, however, produced the characteristic changes of syphilis in the aortic valve: adhesions of the cusps to the wall of the aorta with consequent widening of the commissures and thickening of the free edges with shortening and rolling toward the left ventricle. This resulted in aortic insufficiency and cardiac hypertrophy. Neither in the gross nor at microscopic examination of the myocardium was any lesion discovered which might be interpreted as syphilitic.

Modern concepts of pathology have largely abandoned the diagnosis of syphilitic myocarditis. It is doubtful that such an entity exists since the published cases can usually be explained on the basis of coronary disease. The congestive failure exhibited by this patient was probably due to cardiac failure, in part caused by the insufficiency of the aortic valve, in part by the impairment of the coronary circulation. A dimpling of the aortic wall marked the site of the ostium of the right coronary artery; its lumen was completely occluded by a proliferation of the intima. As in the case of the aortic valve, this is a reflection of the syphilitic aortitis, which regularly produces an endarteritis obliterans of varying degree at the ostia of the branches of the aorta; it is, however, unusual for the process to obstruct completely a lumen of a larger vessel. In this case both coronaries had been affected, although only the right had been occluded. The ostium of the left common carotid was also completely obliterated and the lumen of the innominate reduced to approximately one-fourth its original size. Upon this was superimposed a fresh thrombus. Thus, all circulation through the large neck vessels was blocked.

Microscopic examination of the right internal capsule showed focal hemorrhages, glial proliferation and early encephalomalacia. Thus the left hemiplegia which occurred nine days before death is satisfactorily explained. However, in addition there were changes of older date in the left basal ganglia: cyst formation due to an old focus of encephalomalacia. Its pathogenesis can be easily explained on the basis of the obliteration of the left common carotid. It is, however, somewhat more difficult to understand the absence of clinical symptoms; possibly a temporary hemiplegia of slight degree had occurred and had not been noticed by the patient. The clinical diagnosis could thus be nicely substantiated. The extraordinary difference in the blood

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*Selected by Dr. H. T. Karsner from the Clinical-Pathological Conferences at Cleveland City Hospital, as the third of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems."

pressures of both arms is only partially explained. The aortic insufficiency explains the high pulse pressure on the left. On the right the obstruction produced by the endarteritis in the subclavian branch had been complete although the main branch, the innominate, was only partially obstructed until the final episode of thrombosis. Apparently the interposition of this obstruction had prevented the development of the diastolic drop in blood pressure in addition to decreasing the systolic level. That there had been cardiac failure over a considerable period of time was shown by the chronic passive hyperemia of the lungs. A focal bronchopneumonia was the immediate cause of death.

The final anatomical diagnosis on this patient is therefore: Syphilitic aortitis; syphilitic aortic valvulitis with aortic insufficiency; syphilitic endarteritis obliterans of vessels arising from aorta with complete occlusion of right subclavian artery and ostia of right coronary and left common carotid and partial obliteration of innominate, with recent thrombosis of lumen of innominate; encephalomalacia, remote involving left caudate nucleus, claustrum and putamen, recent involving right internal capsule; cardiac hypertrophy (400 Gm.); chronic passive hyperemia of lungs; focal bronchopneumonia.

Acne Vulgaris

Several theories as to the action of X-rays in the treatment of acne vulgaris have been advanced. The old theory that X-rays have a bactericidal action has been rather definitely disproved.

X-ray alone is never justifiable, although in many cases there will be great improvement or a disappearance of the lesions. Invariably the patient will sooner or later have a recurrence, whereupon demands will be made for more treatment, and we are all aware of the dangers of too much X-ray therapy. As the first danger signs, such as skin irritability or flushing, make their appearance, treatments should be stopped at least temporarily. Later, should dryness or slight wrinkling be noticed, the treatment should be immediately discontinued. Unfortunately, at this stage if the acne is not cured, a few patients, regardless of warning, insist on continued treatment, and when refused by the physician will occasionally go elsewhere. At times they even deny having had previous X-ray therapy, and should the new consultant be caught off guard or not recognize the warning signs, a radiodermatitis is sure to develop. Fortunately, these conditions are few and far between.—Howard E. Twining, M.D., Philadelphia; Pa. M.J., Vol. 44, No. 9, June, 1941.

Neuro-Syphilis and Gastric Symptomatology

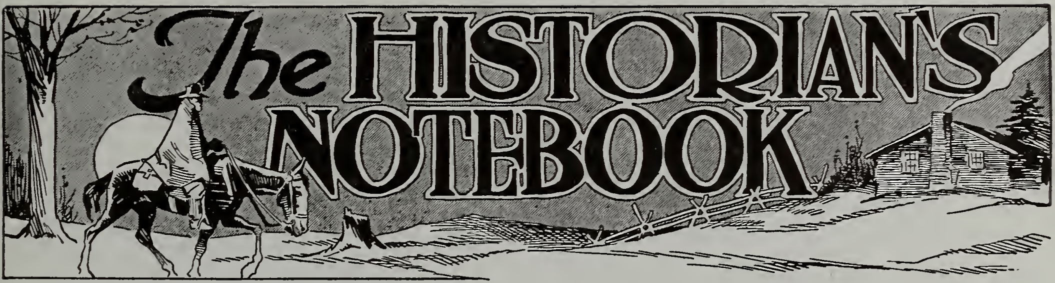
The remark has often been made that syphilis can simulate any disease. And so it is with neurosyphilis and gastric symptomatology. The classical "gastric crisis" of tabes is easy to recognize clinically. However, these occur in only 10 per cent of tabetics. Far more numerous are the patients with recurrent gastric distress not necessarily paroxysmal in type or accompanied by severe pain or continuous vomiting. In fact the symptoms may closely simulate either ulcer of the stomach or gall bladder disease. Pylorospasm can frequently be demonstrated on fluoroscopy and symptomatic relief afforded by adequate dosage of belladonna.

A thorough neurological survey will frequently uncover minor but significant changes—such as inequality and sluggishness of the pupils, optic atrophy, reflex abnormalities, especially loss of the ankle jerks. Sufficient attention has not been called to the relatively frequent presence of areas of cutaneous hypoalgesia. These have a predilection for the nose, anterior chest at the nipple level, inner surface of the arms and distal portion of the lower limbs. A negative blood serology fails to reveal the underlying disease of the nervous system in many cases. The most important diagnostic measure is of course examination of the spinal fluid. In 1822 Stokes analyzed 200 syphilitic patients at the Mayo Clinic whose chief complaint was "stomach trouble." Thirty-five of these, or 18 per cent, had had needless abdominal operations, whereas in all but two patients there were definite clinical clues to the underlying syphilis.

Experience from cordotomy in the treatment of the gastric crisis of tabes has brought out some interesting points. Cutting the spinothalamic tract on both sides of the cord relieves the intense pain, but the nausea and vomiting may persist. This suggests that the gastric symptoms are vagal in origin or at least related to the vegetative components of the nervous system whose pathways would not be interrupted by cordotomy.—James C. Fox, Jr., M.D., New Haven; Conn. S.M. Jr., Vol V, No. 6, June, 1941.

SO THIS IS PROGRESS

Progress is determined not by where you are but where you are headed. We were reading this morning an article on vitamins. One of the case histories was about a poor fellow who had a motley assortment of ailments, one of them being tuberculosis. He was given liberal doses of vitamins and he improved so much that at last the doctor was able to discharge him—**to a tuberculosis sanatorium!**



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

The Beginning of Medical Organization and Medical Practice at Warren, Ohio[1]

JAMES J. TYLER, M.D., WARREN, OHIO

(Continued from June issue)

THERE is no more sense in such a suit than there would be if a doctor should assume to prosecute three eminent lawyers for losing a case they had done their best to win." States Willson,[24] "Senator Ben Wade was very much dissatisfied with his part of the case after he had fully looked into its merits. At the conclusion of the trial he met Tod, the doctor's lawyer, and asked him, "How does the doctor feel over this?"

"Pretty hard," responded Tod.

"Well," said Wade, "If he will forgive me this time I will never engage in so dirty a case again."

Mr. Tod told this to Dr. Harmon, who responded: "Tell him I will forgive him. If a man has done me a wrong and apologizes, I make it a point never to hold resentment against him."

"Toward Giddings he felt no little anger, regarding his manner of conducting the case as persecution. He never fully forgave him, but when the old statesman resigned from Congress because of the unwarranted course of that body in censuring him for his attitude on the slavery question, the big heart of the old doctor caused him to overlook the hurt of the past, and to aid in Gidding's triumphant return to Washington."

In addition to the practice of medicine, Dr. Harmon carried on farming extensively. He purchased a large farm in Warren township and devoted special care to raising thoroughbred horses, but also kept choice cattle and Merino sheep. About 1830 the "Warren Jocky Club" was formed, and a mile track was made on the John Leavitt farm in Leavittsburg. Here Dr. Harmon's fleet horses competed with some of the best racers of neighboring states. The Pennsylvania and Ohio Canal went through the track and ended the sport in 1839. Dr. Harmon also became known as a checker player from Maine to New Orleans. Champion players from all parts of the country came to play with him, only to find him their superior. He became a member of the Masonic Order at Warren in 1814, and his name appears in the records as late as 1854.

Dr. Harmon gave up active practice in 1854, having after 1849, been aided by his son, Julian Harmon. His closing years were full of quietness and peace. "In 1852 he returned East with his wife and visited his early home and hers also. . . . He found the remains of his father's old copper mill, still at Rupert, and several boys like himself grown to be seventy and eighty years of age." His death from pleuro-pneumonia occurred February 7, 1858. At the time of his death the Cleveland *Leader* said of him: "His professional life commenced with the settlement of a new, wild and remote region; its growth was his growth; its expansion called for a like expansion in his mentality and acquirements; its mature growth became his; and its history in many respects his history. Generations have been born under his eye and his professional attention, and the same generations have passed away receiving to the latest moment of life the best treatment that his large experience and strong, active intellect could give. . . . A great, a good and a true man has departed, and 'We ne'er shall look upon his like again.'" In possession of Miss Olive Harmon, of Warren, Ohio, is a beautiful oil portrait of her grandfather, painted by John Claude Crawford.[35]

DR. JULIAN HARMON (1824-1903)

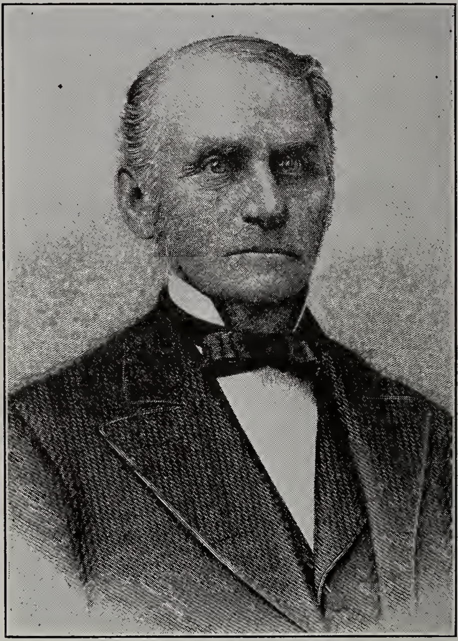
Dr. Julian Harmon was born at Warren, August 6, 1824; graduated at Western Reserve College, Hudson, Ohio, 1846; at Cleveland Medical College, February 28, 1849. He married (1) J. Rebecca Swift (1820-1868), daughter of George and Olive (Kinsman) Swift, July 30, 1857. Her grandfather, Hon. Zephenia Swift, Chief Justice of Connecticut, died while on a visit to Warren, November 27, 1823. Dr. Harmon married (2) Mary E. Bostwick, daughter of L. L. and Margaret (Wetmore) Bostwick, of Canfield, Ohio, June 6, 1871. He practiced with his father until 1854, after which he formed a partnership with Dr. J. P. Smith at one time and with Dr. Cyrus T. Metcalf at another time. His son, Julian Dana Harmon (1863-1898), attended Adelbert College, Western Reserve University, 1884-85; A.B., University of Michigan, 1889; M.D., University of Pennsylvania, 1892. Dr. Julian Dana Harmon practiced with his father until the time of his death.

Dr. Julian Harmon acted for many years as surgeon for the Cleveland & Mahoning, and the Atlantic & Great Western railroads. He also acted as examining physician for Trumbull County, for pensions, for some twenty years and served as secretary of the Trumbull County Medical Society for a like period of time. He served as trustee of Western College, 1878-1881. In 1872-74 served as trustee of the Northern Ohio Insane Asylum, Newburg, Ohio. In 1877 he was elected vice-president of the Northwestern Ohio Medical Association. In 1862, Dr. Harmon, Dr. Warren Iddings and a Mr. Burton were commissioned by the citizens of Trumbull County to visit Pittsburg Landing, Tennessee. The party brought back eight wounded and four sick Civil War soldiers. In an interesting and lengthy letter[36] Dr. Harmon made a report of the visit. He was for many years an active member of Mahoning Lodge No. 29, I.O.O.F. An obituary notice[37] states that "Dr. Harmon resided on the same lot in Warren from the time of his birth. . . . Unassuming in manners, upright in character, a physician of note, and a public spirited citizen, he exemplified in his life the predominating characteristics of his ancestors, and especially of his revered father, whose acts were forever intimately intertwined with the history of Ohio." For almost one hundred years this father and son continuously served Warren as physicians.

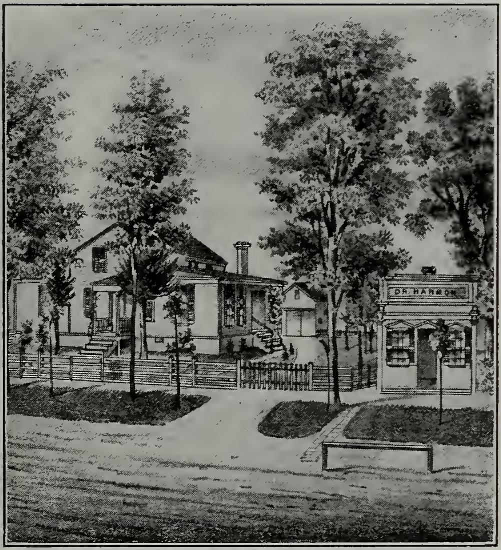
WARREN, OHIO, IN 1830

In 1816 Dr. John B. Harmon built a story and a half frame house, which faced upon the Public Square, and resided there until his death in 1858. It stood on the corner of what is now Harmon and High streets, where the Y.M.C.A. building now stands. In 1885 Dr. Julian Harmon built a beautiful brick mansion on the site of the old homestead. Concerning the laying of the cornerstone of this building a newspaper account[38] states: "On Friday morning, July 3, 1885, the neighbors and friends of Dr. Julian Harmon gathered in front of his premises, to witness the novel spectacle of laying in ceremony the cornerstone, and all evinced a keen interest in viewing the deposits and hearing the remarks. The Doctor spoke nearly as follows:

"In taking down the walls of my old home, these two relics were found in the southwest corner. They are two bones which belonged to the fore-legs of a deer or bear. Speaking of early times, at breakfast my father once said he had trapped a bear in a thicket, a little north of the house. When this house was built, in 1815-16, deer, wolves, and bears were still plenty. I, myself, have seen bears in the woods just out of town, and herds of deer passing to the salt-licks, four miles south. From these relics have grown the purpose of this occasion. Public buildings are founded with pomp and display by public men, and occasion is taken to magnify the value of public life. But is not private life, after all, the source of public life? Is not the destiny of a people really determined by the character of its private citizens? Why should we not, sometimes, stop to set forth the virtues of our friends and neighbors? Why not consecrate our homes in a quiet way, with fitting ceremony? The Roman poet, ages ago, sang how Eneas, when he left Troy in ashes, took his household goods with him and founded the Eternal City. The Romans ever after worshipped their Penates. What public virtues grew up out of the sanctities of the Roman home! What better safeguard for the welfare of our children, my friends, can we have, than is to be found in a reverent memory of the virtues of their ancestors? I can ask nothing better for mine, than that they should revere the memory of the


DR. JULIAN HARMON (1824-1903)

great strong man, rarely equalled in all the world's history as to the strength of his physical and mental endowments, and the patient, loving, resolute woman, by whose union, February 6th, 1822, this house was founded. His power and his labors were felt throughout this new Connecticut. Her gentle influence made her wildest boy, even when grown to manhood, confess his every wrong deed—the most reckless hired man was awed by her reproof. One of those came a thousand miles, just to "see once more the best woman he ever knew," and was sadly grieved that she had gone from earth a year before. I think it fit to place their photographs along with those relics, in this box, and also this of the old house—its 6x12 chimney torn down. It had a front and a back room, and a porch on the northeast. In the front one their six children were born. The porch looked out upon the park. There we had great harvest dinners. It made a hospital for those who were upset in racing around the square upon the first fall of snow, or on the glorious Fourth. The long steps in front made an excellent dentist's chair, where we have seen, it may be, a thousand teeth skillfully twisted out—sometimes with terrific screams—or ludicrous report.



Residence and Office of
DR. JOHN B. HARMON

"If I were building a house just for myself, I think I would like just such another. No hall—front door to the Square, and a porch open to the winds on three sides. At all events, the old house suited its day. In the original plat of the town, lots 40 and 41 were swamps, and remained unoccupied till in 1816, George Parsons and Dr. John B. Harmon made them into dry land by hauling several thousand loads of sand from an island which was in the (Mahoning) river, in the rear of the Trumbull Bank. They were both poor, and took the cheap lots, which have now become almost the finest in the city. Mr. Parsons[39] was a laborer—along with Francis Freeman,[40] he took the job of chopping the timber on the site afterwards of the Western Reserve College, in Hudson. He was an early school teacher—a flatboat man to New Orleans; clerk of the Court; Mayor of the village, and bank president. He built the most pretentious house which is now about to give way to the still more imposing Opera House. . . . Let us glance at the town as it was in my early boyhood, say about 1830. . . . (There was a deep gulley at the southwest corner, and elevations at the southeast and northwest corners of the Public Square). . . . When Mr. Parsons was made mayor, grading began, and quite a row ensued, but the work went on from that time, till some ten feet had been filled in at the southwest corner, and the others had been cut down some five or six feet. I have seen the river swelling over into the swamp in the rear of Market Street blocks. I have seen the water belly-deep to a horse getting into the barn of the Van Gorder Hotel. Still I never thought, when a boy, that I was born and brought up in the backwoods. The people here always seemed to me to be a very civilized people!

"Well let us count the families. . . . We may conclude that in 1830 there were in Warren 300 people. There were three hotels, three doctors, five or six stores, three blacksmith shops, one wagon shop, five or six lawyers, two tanneries, and just east of town, a clock factory, two grist mills, one carding mill, one cloth-dressing shop, one hat shop, one, perhaps two tin-shops, one bank, one printing office, one meeting house, one Academy. . . . Quilting parties, singing and spelling schools were the chief amusements; a horse-race and a street fight now and then gave a touch of variety. One of the most stirring events was the arrival of the stage-coach of a summer afternoon, when Pete Housel blew his horn, folks were out to see his four-in-hand tearing down the pike, under the crack of the whip, circle the square, and again swing 'round at the hotel, ere the passengers were alighted. Another turn in a flash and the steeds were at the barn, save when an upset was thrown in to add to the excitement.

"Shooting matches and hunting trips were in vogue. . . . In the winter, besides skates, we had immense sweeps on the river and at the pond in the rear of Market Street. Looked at on every side, there was as much life and hearty good cheer as can be conceived possible for a people to enjoy. . . . I would reverently ask God's blessing on this new house. May it be successfully completed. May no harm befall its builders; and may simplicity, neighborly kindness and loving charity ever characterize its occupants.

(Concluded in August issue)

Medical Sketches

LOUIS S. DEITCHMAN, M.D., YOUNGSTOWN, OHIO

THE UNEXPECTED

A SUNNY morning in December, 1919. The snow which fell during the night is white and crisp underfoot. It is the first day of my Christmas vacation from medical school, so I walked down town and am standing on a corner of our "public square", giving the town "the once over".

Suddenly a Ford climbs the sidewalk at exactly the spot where I am standing, knocks me through a window into a basement restaurant.

Had I been able to appreciate the humor of the situation I might have immediately called out for a ham sandwich. But being somewhat dazed and very much frightened, my first act is to get an assortment of legs and arms unscrambled. An ambulance arrives and rushes me to the emergency room of the City Hospital.

By that time my head has cleared and the following scene presents itself. There are two tables in the emergency room, placed side by side. I am on one table and on the other one is stretched out a man, completely unconscious, and an intern, who happened to be Dr. William Skipp (our immediate past president of the State Association), is working hard over this man, trying to revive him.

To be sure the treatment was rather heroic and one not prescribed in medical textbooks. Here is the procedure. He was whaling away, as hard as he could, with a broom-stick, at the man's soles.

Those who knew "Bill" Skipp in his younger and better days will remember that he was just about twice his present weight and that he carried a respectable wallop. Bill was not fooling either. It certainly was not a sight to cheer a prospective patient. "My God, am I next?" thought I.

Of course, as I found out later, it was all simple. Bill was just reviving a drunk in the best accepted manner. But the accident and Bill's applied therapeutics were both unexpected, to say the least.

THE TRAGI-COMIC

A balmy summer night in 1921. It is beautiful outdoors; a full moon and myriads of stars; a faint breeze is blowing from Mill Creek Park. It is a night for romance and outdoors, but the entire resident staff of the City Hospital is huddled in the stuffy interne's quarters, playing penny ante. The author is dealing a hand of "spit in the ocean".

The Author

● Dr. Deitchman, Youngstown, is a graduate of University of Pennsylvania School of Medicine, 1921; member American Academy of Ophthalmology and Otolaryngology; visiting ophthalmologist and otolaryngologist, Youngstown Hospital and Mahoning County Tuberculosis Hospital.

Emergency calling. As the cards are running good, he leaves the game reluctantly. The patient is a middle aged bleary eyed derelict.

Name—John L.
Address—None.
Occupation—Farm work, occasionally.
Complaint—"Maggots".
Maggots where?
All over.

The author is somewhat non-plussed. It was a pathological entity entirely unknown to him. Nevertheless, he manages to hide his confusion under an air of professional gruffness and orders the patient sent up to ward bed.

In the meantime he sneaks up to the library to look up "Maggots". A search of the literature yields a two-line item in Da Costa's Surgery, giving the etiology, but saying nothing about treatment.

By that time the patient is undressed and in bed. On examination it was found that his entire body was literally covered with bluish grey rupia, each one having a small ulcerating crater at the apex, from which one or more wriggly worms were bashfully peeping, as if playing hide and seek. It was not an appetizing sight, still it was a job to be done.

But how to get the thousands of vermin out? It was impossible to pick them out, since they had burrowed and undermined the ulcers making a catacomb arrangement for hiding. It was finally decided, upon due deliberation, to place some cotton sponges saturated in ether over the openings. The rationale was to make things so uncomfortable for the maggots that they would leave their hiding places and come to the surface.

It worked. The little fellows, after taking a few whiffs of ether, either lost their sense of direction or became dazed. At any rate, they began to emerge and as they came to the surface a nurse and I picked them off and dropped them in a pail.

Well sir, we picked them for several hours

Note—One of a series of medical literary essays written at the request of The Editor.

and when we finished we had picked a third of a bucket full.

In due time J. L.'s Wasserman was reported 4+. He was at once started on vigorous antileutic treatment and it was uncanny to see how these ulcers melted away, and in an incredibly short time.

Under the civilizing influence of soap and water, plus medication and a clean bed, J. L. emerged an interesting person. According to his story he came of a good British family, had traveled extensively, was in the army, had fought in the Boer war, and finally came to this country to make his fortune. But luck was against him and drink did not help. So he kept going from bad to worse and finally became a migratory farm hand and hobo.

As J. L. was leaving the hospital he said to me "Doc, you have been good to me and I'll remember it".

"Oh, forget it, just remember to continue your shots", was my parting advice.

One day, several weeks later, while assisting in surgery, I received a phone message that a "gentleman" was waiting to see me.

It was some little time before I could leave the operating room, and when I came to the front office, there was J. L. dressed in a checkered suit and red shoes, all smiles.

"Doc, here is something for you". He handed me what looked like a box of cigars. I accepted it with thanks, and went about my business.

That evening, after dinner, I decided to pass around some cigars, and when I opened the box, there, on top, neatly folded, were two fifty-dollar bills.

THE TRAGIC

My first year in practice. Steve G. was my first primary pernicious anemia. Before the introduction of liver therapy the treatment was entirely "expectant".

Expectant of what?

The prognosis was always hopeless.

Like other p.p.a.'s, Steve's appetite was rather capricious. He would switch from one article of diet to another. Periodically he would develop a craving for liver, and eat it several times a day.

His condition went up and down. There were several remissions, when he seemed considerably improved, but like all other pernicious anemias, he finally succumbed to the disease.

A few months later Minot's work on liver therapy appeared. I checked Steve's records and found that his remissions followed his liver eating jags. Yet it never occurred to me that liver might have had some therapeutic action.

How often immortality knocks on our door and we do not know it!

THE DRAMATIC

Brr, how cold! 2:00 A.M. A night call in sub zero weather. After a great deal of sputtering and coughing, the Ford is cranked up and I am on my way to make a call in one of the slum districts.

Up one staircase and down another, through a long dark hallway into a dimly lit room. Not much furniture, but several children strewn about. In one corner a man is heavily engaged in petting a woman. In the center of the room a bed and in it the prostrate form of another woman.

"Doc, that there's my wife, she fell in a faint a couple of hours ago and we ain't able to bring her to".

Follows the business of examining. Pulse, temperature and respirations normal. Heart sounds O.K. What could it be? Uremic coma, diabetic coma, and there are other possibilities too. Throughout the examination the patient is dead to the world.

Ah, the "dead woman" raises one eye lid a trifle, just a flutter, but enough to give the young medico the diagnosis and an idea. He continues the examination. He gets a pin and moves toward the patient's feet. Suddenly he jabs the pin into the woman's sole. The resurection is dramatic. Up comes the patient with a start.

"What're you trying to do, you S. of a B.?"

And that was the doctor's fee.

Red Cross Sponsoring Campaign for Blood Plasma Reserve

Creation of a national reservoir of blood plasma to be used by the Army and Navy for emergency transfusions, as well as for treatment of civilians injured in disaster, is now actively under way. Sponsor of the project is the American Red Cross which has undertaken the step in response to a joint request received from Surgeon General James C. Magee, U. S. Army, and Surgeon General Ross T. McIntire, U. S. Navy.

The substance is being prepared in two forms: lyophilized plasma which, by the simple addition of sterile water, is ready for use, and ordinary liquid plasma. Present plans call for the production of 10,000 units of dried plasma, a unit being equal to one pint of processed whole blood.

Processing of whole blood for the production of plasma is being done at the Sharp and Dohme Laboratories in Philadelphia, Pa., where the product is also being stored. Donors are currently being enrolled by Red Cross Chapters in the Greater New York area and in Philadelphia. As need arises, chapters in other districts will be called upon to enroll donors.

At practically any age and especially in young adult life, respiratory tuberculosis seems a disease of more serious prognostic import among females than among males.—Lancet editorial, Feb. 22, 1941.

An Analysis of the Record

By WM. M. SKIPP, M.D., YOUNGSTOWN, OHIO

(Address of the Retiring President)

IT has been a great honor to have had the privilege of working for the Ohio State Medical Association as a member, as a Councilor and as your President during the past year. It has been most gratifying to have had the active support and assistance of so many members of the Association during my term of office.

We may look with pride at the record of the past twelve months. However, I hasten to add that what has been achieved has been brought about primarily through the concerted efforts of so many members throughout the entire state. It is true that those of us who have been serving you as officers have tried willingly and cheerfully to do a good job, but it is equally true that we would have failed in most of our undertakings had we not had the support and cooperation of the membership generally. I mention this to emphasize the importance of unity and teamwork in organization activities. It is hoped that the members will give my successor, and those who will follow him, the same degree of assistance they have accorded me.

TWO OUTSTANDING ACTIVITIES

There is no standard "prescription" as to what the retiring president shall say in his swan song. Therefore, if you will be patient I should like to review in some detail two of the outstanding activities of your Association during the past twelve months and to mention in a general way some of the other matters which have been considered.

Before taking up these matters, may I commend the work which has been done during a very active year by members of The Council and by members of the various committees of the Association. Almost every week-end found a delegation of members gathered together in Columbus for the purpose of considering questions of vital importance to all of us. These men have made real sacrifices and they have met their obligations in a most commendable manner. We owe them a vote of appreciation.

As all of you know, the Ohio General Assembly has been in session since the first of the year. During any legislative year the activities of the Association must necessarily be speeded up. The present session of the State Legislature has been one of the most difficult in many years. This was partially due to the successful efforts on the part of the Association in obtaining the enactment of an enabling act establishing a legal basis for the organization of medical service plans for those of low income. This, in my opinion, was the number one accomplishment during the past year.

HOUSE BILL 51

It is unnecessary, I believe, for me to describe in detail the course of House Bill 51 through the Ohio General Assembly as I am sure that most of you are familiar with the history of the proposal through articles published in *The Ohio State Medical Journal* and special bulletins which have been issued from our Columbus office.

House Bill 51 was signed by the Governor on May 6 after it had passed the House of Representatives by a vote of 110 to 8 and the Senate by a vote of 32 to 2. It will become effective on August 5.

There are many members of our Association who deserve a share of the credit for our success in obtaining the enactment of this proposal. To all who helped, may I extend a personal expression of appreciation.

INTENSIVE WORK DONE

After the House of Delegates at the Cincinnati meeting in May, 1940, had authorized the presentation of the proposed enabling act, many meetings were held during the Summer and Fall by the Committee on Medical Service Plans, headed by Dr. Parke G. Smith, Cincinnati. This Committee made a thorough study of similar laws in other states and worked diligently in cooperation with our legal counsel, Mr. Wayne Stichter, Toledo, in the drafting of House Bill 51. After its approval by the Committee on Public Relations and Economics and The Council, the Association requested Miss Margaret A. Mahoney, Cleveland, a member of the House of Representatives, to introduce the bill in the 94th Ohio General Assembly.

After five hearings by the House Insurance Committee, the bill was passed by the House of Representatives and later by the Senate by overwhelming majorities. Senator Lawrence A. Kane, Cincinnati, steered the bill through the Senate and his name was placed on the proposal as coauthor. A great deal of credit for our success is due Miss Mahoney and Senator Kane for their efficient work in guiding the bill through the Legislature.

FINE WORK BY COMMITTEEMEN

Probably the lion's share of the credit for the success of House Bill 51 belongs to the members

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Annual Address of the President, delivered at the first session of the House of Delegates, Ohio State Medical Association, at the Ninety-Fifth Annual Meeting, Cleveland, Ohio, June 3, 1941.

of the Sub-Committee on Legislation of the State Association and to the chairmen and members of the legislative committees of the county medical societies. In practically every county the local legislative committee functioned efficiently and effectively. The Association appreciates the work which was done "back home" where votes really are made. Without excellent local assistance we could not have succeeded.

Also, the Association owes a debt of gratitude to Executive Secretary Nelson and Assistant Executive Secretary Saville for their able work in Columbus, especially on matters of tactics and procedure, and to Mr. Aszling who directed the program of publicity on behalf of the bill.

In general, our accomplishment in obtaining the enactment of House Bill 51 is a perfect example of what can be achieved by proper coordination and cooperation on the part of state and local committees.

ENTIRE PROGRAM SUCCESSFUL

At this point it would be well to mention also that our entire legislative program was brought to a successful conclusion because of the diligent work of our local committeemen. More than 100 proposals having some health or medical angle were considered by the 94th General Assembly. A number of constructive health and medical measures were enacted. Other proposals which would have been detrimental to public health and which were opposed by the medical profession were defeated.

Now that our enabling act for medical service plans has been enacted, the medical profession of Ohio finds itself confronted with the responsibility of organizing one or several medical service plans under the provisions of the act. Under this act, the profession has an opportunity to initiate one of the greatest public health programs in Ohio's history. We have told the public and the Legislature what we intended to do in an effort to try to assist those of low income in meeting their health problems and their economic problems resulting from sickness. The public and the Legislature are expecting us to take prompt and definite action.

A number of our county medical societies have tentative medical service plans drafted and are anxious to complete them and place them in operation.

MUST PROCEED CAREFULLY

Although I am just as anxious as any member of the State Association to have one or several medical service plans in operation at the earliest possible time, I feel obligated to warn all of our societies against premature or hasty action in this field.

Before any medical service plan organization is set up, all available information on this subject must be accumulated and thoroughly studied. Considerable information on this question has been assembled in the files of the Columbus office and is available to local societies.

The enabling act is quite definite as to how a medical service plan corporation must be organized and sets forth certain fundamental requirements which must be met. All provisions of the act must be followed. Competent legal counsel should be obtained by those taking the lead in the establishment of such corporations. Personnel must be selected carefully. Excessive overhead expenditures must be avoided. Members of the profession must be educated as to the great possibilities of a properly organized and administered medical service plan. Proper safeguards must be established to insure adequate and high class services to subscribers. The assistance of prominent laymen in this enterprise must be enlisted. A great opportunity confronts us. Each plan started must become a success. The eyes of the public are on us and we must not fail.

NEED COORDINATING COMMITTEE

In order that we may avoid mistakes and so our activities will be coordinated to the greatest possible degree, it is my recommendation that this House of Delegates authorize the incoming president, Dr. Paryzek, to create a special committee to act as a liaison between The Council and local medical societies on the matter of organizing medical service plans. Through this committee, proper information and advice can be made available to local societies and efforts can be made for uniformity of plans. We appreciate the fact that conditions vary from community to community. At the same time, every effort should be made toward uniformity with respect to the details of plans which may be set up or contemplated. Obviously, each county medical society is a unit unto itself and may proceed as its judgment dictates. On the other hand, the medical profession of the state as a whole has a tremendous stake in this particular activity. If mistakes are made in one community, the reaction throughout the entire state will be bad. For that reason I am convinced that it would be wise for all local societies interested in the establishment of a medical service plan to look to The Council of the State Association and the special committee, which I hope will be created, for guidance and assistance. As on other matters of importance, if we work together as a unit we can be more sure of success in the final analysis.

Now, may I comment for a moment on what, in my opinion, was the second outstanding activity of the past year.

WORK OF PREPAREDNESS COMMITTEES

Since the last Annual Meeting of the Ohio State Medical Association a great National Defense Program has been inaugurated. Naturally this has greatly increased the responsibilities and work of the State Association.

The medical profession is a vital cog in our defense program. The profession never has shirked its responsibilities in times of peace or in times of war. Hundreds of Ohio physicians are now on duty with our armed forces. Hundreds more will respond when their services are required.

In addition to making available its services for the military, the profession must be alert to the task of meeting the health problems of our "home defense". The health of the industrial worker, the farmer, the transportation employe—in fact the working population as a whole must be guarded in order that vital materials which are essential to the fighting forces may be supplied. We must make sacrifices. We must not fail to meet our patriotic duty as citizens and as doctors. We will not fail our nation in this time of crisis.

BIG PROBLEM HANDLED

Last Fall, The Council created a Committee on Medical Preparedness. That committee, under the leadership of Dr. Paryzek, has done a magnificent job. An equally fine job has been done by the preparedness committees of the component county medical societies.

Approximately 95 per cent of the physicians of Ohio have been classified as to the part which they are competent to take in the National Defense Program through the questionnaires of the American Medical Association. It was largely through the follow-up work of the state and county preparedness committees that this excellent response was obtained.

At the request of Governor Bricker, the State Association assumed the responsibility of obtaining medical examiners for the various local draft boards operating under the Selective Service System. Our state and local preparedness committees discharged this responsibility in an efficient manner. At present more than 1,000 physicians are giving much time without compensation in making physical examinations of registrants—further evidence of the patriotic spirit of the medical profession as a whole.

HAS AIDED WAR DEPARTMENT

Our state committee has kept in close touch with War Department officials in Ohio on matters of policy and procedure. Physicians for work on the induction boards have been supplied. Assistance has been given the preparedness committee of the American Medical Association. Efforts have been made to protect certain communities from being deprived of necessary medical personnel through conferences with officials in charge of assembling medical reserve officers for active service. Efforts are now under way, through local committees, to get local draft boards to defer medical students until they have completed their medical education when they will be of greater value to the military forces and insure continuity in medical education.

Words can not adequately describe the great amount of work which the preparedness committee, both state and local, have done. We are proud of the record which they have made. It appears as if even bigger problems and tasks will confront us during the ensuing months. For that reason, we must be prepared to make greater sacrifices. We must maintain active and alert preparedness committees in all of our counties. The profession must be prepared for any and all eventualities.

OTHER ACTIVITIES REVIEWED

Because of their unusual importance, I have gone into some detail in telling you about these two achievements of the Association. There were many other activities of importance during the year which is about to close but time will not permit me to give them the emphasis which they deserve. For a rather complete picture of what has been going on within your Association during the past 12 months, read the annual reports of the various committees which were published in the May issue of *The Journal* and, sometime at your convenience, review the last 12 issues of *The Journal* in which you will find many articles dealing with the activities and affairs of the Association.

However, I believe it is necessary for me to comment briefly about a few of the questions which have been handled by the committees and The Council.

In addition to acting on matters of policy involved in legislation pending before the General Assembly, the Committee on Public Relations and Economics has worked out a basis for cooperation between the county medical societies and the National Youth Administration on medical and health problems of those employed on N.Y.A. projects. The statement of policy on this question, which was approved by The Council, appeared in the March issue of *The Journal.* In addition, that committee has maintained a close contact with various state departments, including the health and welfare departments, and other agencies interested in health questions. As a result of these conferences and contacts, there is a cordial understanding and mutual feeling of good will and cooperation between official and unofficial agencies and the State Association.

RELATIONS WITH INDUSTRIAL COMMISSION

The Sub-Committee on Workmen's Compensation has held several conferences with officials of the State Industrial Commission. These have resulted in the settlement of a number of problems of long standing. There are a few questions which have not as yet been adjusted to the satisfaction of the State Association and these will be taken up by the committee as promptly as possible. In general, there is a splendid relationship existing between the Association and the Commission. We were sorry to learn of the resignation of Dr. McCurdy, as supervisor of the Medical Division of the Commission. Many improvements were initiated under his guidance and it will not be an easy task for the Commission to find as a successor to Dr. McCurdy a man possessing such excellent administrative ability and such sound judgment on medical questions. The cooperation which he displayed on matters of interest to the Association resulted in a better understanding between the Association and the Commission.

EDUCATIONAL PROGRAM

Under the direction of the Committee on Education and its Sub-Committee on Regional Postgraduate Lectures, postgraduate lectures were presented in 10 regions during the Fall of 1940. These were well attended and the presentations in all instances were most beneficial. Plans have not been completed for the Fall of 1941 because of the national emergency. The Association may have to dispense with the lectures this year if the national situation becomes more critical. However, this important part of our activities will not be neglected and will be continued if it appears practical for us to do so.

Our Bureau of Public Education, under the direction of Mr. Aszling, is to be congratulated for its steady progress. It is suggested that all members read the annual report of the Bureau. By doing so you may be able to realize the vastness of the work it is doing and its real significance. It is bringing the profession into closer touch with the public and creating a better understanding between physicians and their patients.

THE JOURNAL COMMENDED

The Ohio State Medical Journal continues to be the best publication in its particular field. Its importance can not be overemphasized. Read it from cover to cover each month. By doing so you will be improving yourself scientifically and adding a store of knowledge about many of the questions which confront the profession and with which the profession must deal.

We are fortunate in having an able and conscientious staff at our Columbus office. Mr. Nelson, Mr. Saville and the other members of the staff never shirk an opportunity to perform a beneficial act for the profession as a whole and members as individuals. Their loyalty and efficiency have kept the machinery of the Association humming. Without their able assistance, your officers and committee would find it virtually impossible to handle many of the matters which the Association constantly is being called upon to consider.

In conclusion, may I urge you to give serious thought to the future. The definite trend toward government control of everything, medicine being no exception, continues. Under the guise of "national defense", many new programs in this direction are being inaugurated.

WHAT OF THE FUTURE?

We as a profession must be constantly on guard. It is our duty to keep a close watch on all matters pertaining to public health. We should insist that health programs are carried on under the guidance of the medical profession and are administered in a manner beneficial to the public health and welfare. It is to the advantage of the people that medicine continue as a free, non-political enterprise. The people must be impressed with this fact. It is the responsibility of the medical profession to see that the public is properly informed and properly advised on these matters. If we do not meet these responsibilities, insist that we be given leadership in medical and health activities, and then accept the leadership when offered, we can expect but one thing—government control.

To guide us through these uncertain times, we need sincere and active men in key positions in our state and county societies. We must be an informed profession. We must work together. We must uphold and abide by the principles of professional ethics. We must fight to maintain those standards which have enabled the medical profession in this nation to give the American people medical and health services superior to those of any other nation in all history. Medicine's accomplishments and achievements are worth defending and preserving. If the membership of the Ohio State Medical Association is willing to make the sacrifices involved, this Association can continue to be an important factor in combating those trends which I have mentioned. Let us make the medical profession a force to be reckoned with. Without sacrifice and hard work, the job can not be done. The decision rests with each and every member, for in the end the profession and our Association are simply what we as individuals choose to make them.

Coming Meetings

American Association of Obstetricians, Gynecologists and Abdominal Surgeons, Hot Springs, Va., Sept. 11-13.

American Association of Railway Surgeons, Chicago, Sept. 8-10.

American Clinical and Climatological Association, Skytop, Pa., Oct. 16-18.

American Congress of Physical Therapy, Washington, D. C., Sept. 1-5.

American Public Health Association, Atlantic City, Oct. 14-17.

American Roentgen Ray Society, Cincinnati, Sept. 23-26.

Southern Medical Association, St. Louis, November 11-14.

Society of American Bacteriologists, Baltimore, Dec. 29-31.

The President-Elect

WHEN, by unanimous action, the House of Delegates named Edward J. McCormick, of Toledo, President-Elect of the Ohio State Medical Association at its recent 1941 Annual Session in Cleveland, it adhered to its established policy of conferring positions of leadership upon men of proven value to their profession.

Dr. McCormick will accede to the presidency of the Association when Dr. Harry V. Paryzek of Cleveland, who was installed at the 1941 meeting, lays down his gavel next Spring in Columbus.

It is with a long and noteworthy record of service to both the medical profession and civic and patriotic organizations that Dr. McCormick comes to the highest honor which his medical colleagues in Ohio can bestow on him.

Among the outstanding honors he has earned is national leadership of the Elks' Lodge. He was named Grand Exalted Ruler of the B.P.O.E. at its reunion in Atlantic City in 1938, and during his year in that position he established a nation-wide reputation as a patriot, an able speaker, and a worker for civic betterment.

Edward James McCormick was born in Alger, Michigan, in 1891. After primary education in the public schools of Bradner, Ohio, and Toledo, he continued his academic studies and obtained the degrees of Bachelor of Arts and Master of Arts before entering the field of medicine. In 1915 he was graduated from the School of Medicine of St. Louis University.

One of the best known surgeons in Northwestern Ohio, Dr. McCormick has been active in the affairs of medical organizations since early in his practice. He has just completed his second term as Fourth District Councilor of the State Association, and prior to election to that position he was chairman of the Association's Surgical Section. While on The Council, he served as a member of the Auditing and Appropriations Committee.

Dr. McCormick is a past-president of the Academy of Medicine of Toledo and Lucas County and also holds membership in the Northern Tri-State Medical Association and the American Association for the Advancement of Science.

Dr. McCormick is director of surgery at Lucas County Hospital, visiting surgeon at Toledo Hospital, chief-of-staff and staff surgeon at St. Vincent's Hospital and staff surgeon at St. Anthony's Orphanage, Toledo. He holds fellowships in the American Medical Association and the American College of Surgeons. From 1919 to 1921 Dr. McCormick was professor of biology at St. John's College.

At present Dr. McCormick is president of the Toledo Board of Health. He is also a past-president and member of the board of directors of the Toledo Lions' Club, served eight years as a member of the board of trustees of Toledo University, is past-president of the Toledo City Managers League, former member of the Lucas County Charter Commission, former chairman of the Toledo Boy Scout Court of Honor, and a present member of the National Council of the Boy Scouts.

The new President-Elect is a member of Alpha Omega Alpha, national honorary medical fraternity, and belongs to Phi Beta Pi, professional fraternity. He is a member of the board of trustees of the National Physicians Committee for the Extension of Medical Service and is also serving as a trustee of the Toledo Chapter of the American Red Cross and the Toledo Boys' Club.

Dr. McCormick is a member of the executive committee of the Toledo Council of Social Agencies and recently served as a budget committee member on the Toledo Community Chest. Also among his local affiliations are membership in the Toledo Club and the Inverness Club.

Military affairs, too, have claimed Dr. McCormick's attention. As a reserve officer, he went to France in 1917 and served for 18 months with the 46th North Midland Division, British Expeditionary Force. During this period he advanced in rank from lieutenant to major and earned the Military Cross.

After returning to the United States he was assigned to the surgery department at Walter Reed Hospital, Washington, and later commissioned lieutenant commander in the Naval Reserve. He is a past commander of Frank Ferneau Post of the American Legion and now a member of the Toledo Post.

Most important sector in the circle of Dr. McCormick's abundant life is his home and family. In their pleasant home at 2460 Parkwood Avenue, Toledo, he and Mrs. McCormick and their six children—three boys and three girls—form an integral part of the community.

This record of Dr. McCormick's professional and extra-professional careers indicates that when he takes over the Presidency in 1942 the State Association will be in the hands of a leader who is dynamic, aggressive, and experienced in administrative activities.

Official Proceedings of the House of Delegates, Ohio State Medical Association, 95th Annual Meeting, Cleveland, June 3-4, 1941

MINUTES OF FIRST SESSION

THE 95th Annual Meeting of the Ohio State Medical Association was officially opened Tuesday, June 3, 1941, at 4:00 P.M., with the first session of the House of Delegates in the Rose Room of the Hotel Cleveland, Cleveland.

Dr. Charles T. Way, president of the Cleveland Academy of Medicine, opened the meeting and introduced the President of the State Association, William M. Skipp. In presenting Dr. Skipp, Dr. Way gave a brief biographical sketch and concluded with the following summary of Dr. Skipp's tireless efforts on behalf of the State Association during his year as President: "During the present year he has traveled 30,000 miles in our state in the interest of the Ohio State Medical Association. He has talked to 10 meetings of the Woman's Auxiliary in Ohio, and has covered every county within 100 miles of his home city, Youngstown, in speaking engagements. His great purpose has been, during his Presidency, to sell the State Association to the membership, particularly in the smaller communities of the state."

After officially calling the House of Delegates to order, Dr. Skipp presented his Presidential Address. (Published in full on pages 662 to 665 of this issue of *The Journal.*)

Dr. Skipp stated he regretted to announce that Executive Secretary Nelson was unable to attend the Annual Meeting this year because of illness. On **motion** of J. R. Jarvis, Van Wert, seconded by numerous delegates, and **carried** unanimously, a telegram was ordered sent to Mr. Nelson expressing the regret of the House of Delegates that he could not be present, wishing him a speedy recovery, and thanking him for his efficient and loyal services during the past year.

The roll call was answered by 107 delegates and officers. (See official roll call appended.)

On **motion** of C. C. Sherburne, Columbus, seconded by M. Paul Motto, Cleveland, and **carried**, the minutes of the House of Delegates sessions held during the 94th Annual Meeting in Cincinnati, were **approved** as published on pages 649-655 of the June, 1940, issue of *The Ohio State Medical Journal.*

REFERENCE COMMITTEES

The following reference committees, to handle various business matters coming before the House of Delegates, were appointed by President Skipp:

Presidential Address—H. C. Messenger, Xenia, chairman; J. A. Fraser, East Liverpool; Francis W. Shane, Gallipolis; Frank M. Wiseley, Findlay; O. P. Tatman, Chillicothe.

Resolutions—Carl A. Lincke, Carrollton, chairman; Robert Conard, Wilmington; John E. Rauschkolb, Cleveland; W. F. Marting, Ironton; A. A. Brindley, Toledo; G. A. Woodhouse, Pleasant Hill; John S. Hattery, Mansfield; R. R. Hendershott, Tiffin; Robt. T. Allison, Jr., Akron; R. M. Meredith, Marietta.

Annual Reports—Ralph M. Watkins, Cleveland, chairman; M. D. Shilling, Ashland; Charles J. McDevitt, Cincinnati; George N. Wenger, Massillon; J. W. Calhoon, Uhrichsville.

Credentials of Delegates—D. J. Slosser, Defiance, chairman; George T. Harding, Columbus; Floyd D. Yeager, Marion; A. W. Carley, Dayton; Gilbert R. Micklethwaite, Portsmouth.

Tellers and Judges of Election—Chas. T. Atkinson, Middletown, chairman; E. C. Brandt, Crestline; M. Paul Motto, Cleveland; George A. Gressle, Newark; T. R. Cunningham, Fremont.

Time and Place of 1942 Annual Meeting—J. Craig Bowman, Upper Sandusky, chairman; C. E. M. Finney, Springfield; Edward J. Reilly, Youngstown; H. T. Pease, Wadsworth; W. D. Hickey, Leipsic.

ANNUAL REPORTS

Annual Reports of officers and committees, published in the May, 1941, issue of *The Journal,* were submitted by title only and referred to the Reference Committee on Annual Reports.

NOMINATING COMMITTEE

As the next order of business, the House of Delegates elected the following Nominating Committee to present the names of candidates for the various offices, with the exception of President-Elect, at the second session of the House of Delegates:

First District—Emil R. Swepston, Cincinnati.
Second District—D. C. Houser, Urbana.
Third District—Frank M. Wiseley, Findlay.
Fourth District—F. N. Nagel, Toledo.
Fifth District—E. F. Kieger, Cleveland.
Sixth District—George N. Wenger, Massillon.
Seventh District—Carl F. Goll, Hopedale.
Eighth District—A. A. Tombaugh, McConnelsville.
Ninth District—P. A. Jividen, Rutland.

Tenth District—John M. Thomas, Columbus.
Eleventh District—Ross M. Knoble, Sandusky.

ADDRESS BY E. H. SKINNER, KANSAS CITY

At this point, President Skipp, with the consent of the House of Delegates, granted the privilege of the floor to representatives of the National Physicians Committee for the Extension of Medical Service. Edward H. Carey, Dallas, Texas, chairman of the Board of Trustees of that organization, introduced John M. Pratt, Executive Director; and E. H. Skinner of Kansas City, a member of the Board of Trustees, who addressed the House of Delegates. Dr. Skinner explained the purposes of the National Physicians Committee, described some of its activities, and asked the members of the House of Delegates to stimulate interest in the organization in Ohio.

INTRODUCTION OF RESOLUTIONS

The following resolutions were introduced and referred, without debate, to the Reference Committee on Resolutions:

Resolution A. Introduced by A. A. Brindley, Toledo, on behalf of the Toledo Academy of Medicine:

Whereas, Tuberculosis constitutes a major health problem in Ohio, and

Whereas, The laws of the state include many sections relating to the interests of the state government in controlling and eradicating this disease, now therefore

Be It Resolved, That a committee be appointed to study the present laws and regulations in the Ohio Code pertaining to tuberculosis;

That the purpose of this study be to correlate the present laws and regulations into a detailed procedure for the administrative control of tuberculosis as a supplement to House Bill 59, enacted at the recent session of the Legislature;

That this detailed procedure include definition of the following terms: Open case; contacts; isolation; quarantine; disinfection; removal of case from premises;

That it include complete regulations providing administrative control measures with special reference to: Reporting all cases within a reasonable length of time; isolation of all active cases; the enforcement of compulsory quarantine and hospitalization where necessary; examination of all contacts; financial measures necessary to carry out the enforcement of the law; removal of case from one area to another; follow-up and rehabilitation; and

That in drafting the foregoing the following be used as guides: "A Detailed Procedure for the Administrative Control of Tuberculosis," issued by the Illinois Department of Health; "A Compilation of the Laws, Regulations and Agencies Relative to Tuberculosis," issued by the New York State Department of Health; "State Laws of Michigan Relating to Tuberculosis Control."

Resolution B. Introduced by The Council:

Resolved, That the House of Delegates approve the following statement, adopted by The Council:

Enactment of House Bill 51 by the 94th Ohio General Assembly and the signing of the measure by Governor Bricker, making it effective August 5 of this year, provides the medical profession of Ohio with an opportunity to take the initiative in the formation of what can eventually be one of the most beneficial health programs ever planned or established in the State of Ohio.

For several years, the medical profession of Ohio has recognized the need for a joint endeavor by members of the medical profession and low wage earners in inaugurating a plan whereby the benefits of modern medicine can be made more readily available to this group of citizens.

Through the passage of House Bill 51, a sound legal basis for the organization and operation of voluntary non-profit medical service plans for urban and rural low wage earners has been established.

The medical profession sponsored this enabling legislation in the General Assembly. It presented sound and logical reasons for asking the General Assembly to make House Bill 51 a law. It has pointed out to the public many of the benefits which will accrue to a large group of citizens if they will cooperate with the medical profession in setting up medical service plans where they are needed and there is a public demand for them.

Obviously, the responsibility for initiating one or several plans must be vested in some reliable agency, group or organization, having the facilities to work out the innumerable details which organization of a plan will entail. The medical profession of Ohio through its state organization and its 88 component medical societies can, and should, undertake this responsibility.

A number of the larger medical societies of the state have drafted, or are drafting, medical service plans to operate in their respective communities. Several additional societies are giving serious consideration to this question.

Therefore, it would seem appropriate and timely for the House of Delegates of the Ohio State Medical Association, meeting in Cleveland, June 3 and 4, 1941, to adopt the following recommendations on this general subject, to serve as a guide for the State Association, as well as its component local societies. We recommend:

1. That the incoming President, Dr. Paryzek, appoint a special committee, working under the jurisdiction of The Council, to serve as an advisory agency and to which the component medical societies may come for information and counsel. Authority to name such a committee is hereby given to Dr. Paryzek.

2. That all the facilities of the State Association, subject to the approval of The Council, be made available to component medical societies undertaking the organization and operation of medical service plans under the provisions of House Bill 51.

3. That a component medical society proceed carefully in preparing the basic structure for its medical service plan. All provisions of House Bill 51 should be met. Advice of the Superintendent of Insurance and his staff should be sought. Data on the experience of medical service plans in other states should be assembled and studied. Competent legal counsel should be employed. The cooperation and assistance of influential citizens of the community should be solicited.

4. That each component medical society be-

fore putting a medical service plan into operation, submit a draft of the plan, together with supplemental documents, to the special committee of the State Association, authorized under Recommendation 1, for review and comments. This suggestion is made for the purpose of achieving, if possible, a reasonable degree of uniformity and standardization in medical service plans throughout the state. Perhaps complete uniformity can not be accomplished but an effort should be made in that direction. Moreover, mistakes in policy or errors in technique may be avoided through this procedure of having a central, competent board of review pass on tentative plans.

We believe if the foregoing recommendations are made effective, the formation of medical service plans in Ohio can be initiated and carried on in an orderly, systematic manner, producing a favorable reaction on the part of the public generally and enabling this new health program to make a sound beginning.

INVITATIONS FOR 1942 ANNUAL MEETING

The following invitations for the 1942 Annual Meeting of the Ohio State Medical Association were presented:

Russel G. Means, Columbus, on behalf of the Columbus Academy of Medicine and the City of Columbus, invited the State Association to meet at Columbus.

Carl R. Steinke, Akron, on behalf of the Summit County Medical Society and the City of Akron, invited the State Association to meet at Akron.

The invitations were referred, without discussion, to the Reference Committee on Time and Place of Annual Meeting.

The House of Delegates then recessed until Wednesday evening, June 4.

MINUTES OF THE SECOND SESSION

The second and final session of the House of Delegates, 95th Annual Meeting, was called to order by President Skipp at 8:30 o'clock, Wednesday, June 4, following a dinner for delegates and officers of the State Association.

The roll call showed 100 delegates and officers present.

President Skipp read a telegram from Executive Secretary Nelson thanking the House of Delegates for its message of good wishes and stating that he expected to be back on the job and ready for another hard year.

TIME AND PLACE FOR 1942 ANNUAL MEETING

On behalf of the Committee on Time and Place of 1942 Annual Meeting, J. Craig Bowman, Upper Sandusky, the chairman, presented the following report:

The Reference Committee on Time and Place of the Annual Meeting of the Ohio State Medical Association has given careful consideration to the invitations for the 1942 Annual Meeting presented by the Columbus Academy of Medicine and the City of Columbus, and by the Summit County Medical Society and the City of Akron.

The committee has analyzed carefully the question of facilities of both cities and is of the opinion that it is very doubtful that the facilities at Akron are sufficient to insure the holding of a successful meeting in that city. Columbus has been the scene of many successful meetings of the State Association. It is conveniently located and the facilities and accommodations are adequate in every respect.

Therefore, the committee recommends to the House of Delegates that the 1942 meeting of the Ohio State Medical Association be held in Columbus in the Spring, and that the exact dates of the meeting be left to the discretion of The Council of the Ohio State Medical Association.

On motion of Dr. Bowman, seconded by John E. Rauschkolb, Cleveland, and **carried**, the report of the committee was **approved and adopted.**

REPORT OF COMMITTEE ON PRESIDENTIAL ADDRESS

Due to the absence of the chairman, H. C. Messenger of Xenia, the following report of the Committee on Presidential Address was presented by J. A. Fraser, East Liverpool, and, on **motion** of Dr. Fraser, seconded by D. W. Hogue of Springfield, and **carried**, was **approved and adopted:**

Your committee submits the following report on the address of President William M. Skipp, delivered June 3, 1941, at the opening session of the House of Delegates.

It was apparent to your committee, in listening to the President's terse, concise, and gratifying resumé of the past year's progress, that the functions and scope of the Ohio State Medical Association each succeeding year branch out into newer fields of social and economic changes, necessitating more imperatively than ever before the need for selecting the type of dynamic leadership we have had during the past year, with hard working, cooperative committees, able to devote unlimited time to furthering the programs outlined at the past state meeting.

Your committee notes and commends the generous tributes the President pays to The Council, the committees, his co-workers, and the Headquarters Staff, who so efficiently and untiringly labored with him. We feel that the successful completion of their endeavors will long live as a monument to their praiseworthy zeal.

Your committee wishes to stress two dominant achievements, highlighting the administration of President William M. Skipp, namely: The passage by the Legislature and signing by the Governor of the enabling act, known as House Bill 51; and the accomplishments attained relative to medico-military preparedness.

We feel that the successful adoption of the enabling act for medical service plans, meets constructively the problem presented by the low income group and we concur with President Skipp in the expression that, "Under this act, the profession has an opportunity to initiate one of the greatest public health programs in Ohio's history." Further, we endorse the recommendation that this House of Delegates authorize the incoming President to create a special committee to act as a liaison between The Council and local medical societies on the matter of organizing medical service plans.

Your committee, having uppermost in mind the obligation we as physicians owe to both state and nation in times of national emergencies, desires to emphasize the President's report relating to medical preparedness, the classification of all physicians, obtaining medical personnel for draft boards, deferment for medical students and interns, collaboration with the American Medical Association, and meeting capably all demands made on the State Association by the requirements of national defense.

The past year has been exceptional in that military developments and House Bill 51 superimposed two major tasks on the usual duties of the President. We congratulate the President on the ability to face these additional responsibilities and to render the Association service, characterized by successes and innovations in keeping with the dignity and high ideals of our profession.

Your committee desires to express the thought that this address is not the "swan song" of Dr. William M. Skipp, as the State Association expects him to continue as an active leader as in the past.

This administration will go down in the annals of the State Association as meritorious and exemplary.

REPORT OF COMMITTEE ON ANNUAL REPORTS

The report of the Committee on Annual Reports was presented by Ralph M. Watkins, Cleveland, chairman. On **motion** of Dr. Watkins, seconded by E. P. McNamee, Cleveland, and **carried**, the report, reading as follows, was **approved** and **adopted.**

The Reference Committee on Annual Reports, after study of the Reports of Annual Committees as published in *The Ohio State Medical Journal* of May, 1941, wishes to submit the following report:

Annual Report, Treasurer and Committee on Auditing and Appropriations:

As heretofore, Keller, Kirschner, Martin and Clinger of Columbus audited the books of the Ohio State Medical Association and *The Ohio State Medical Journal*. The Reference Committee approves the report as presented.

Committee on Public Relations and Economics:

In May, 1941, issue of *The Ohio State Medical Journal,* this committee published its usual report.

Opportunity arose during the past year for collaboration between the National Youth Administration and the Ohio State Medical Association and the medium of contact on our part was this committee. The members met several times with the NYA officials and a program was developed whereby youths enrolled in the NYA group could receive proper medical examinations. The Council of the State Association approved the action of the committee whereby the medical profession is in such a position that it can guide and supervise these professional activities. The committee is to be commended on this constructive work.

There was not great activity in Workmen's Compensation matters but important affairs were handled as they developed. Various matters are pending at present. We note with regret the resignation of Dr. Sidney McCurdy, who has been Chief Medical Supervisor of the State Industrial Commission since 1936. In the opinion of this committee, Dr. McCurdy has done an unusual job, not only of organization, but also in his highly ethical and honest manner of dealing with the medical profession and the fairness with which he treated both the claimants and the State of Ohio. We heartily approve the recommendation of this committee that Dr. McCurdy be extended a vote of appreciation by this House of Delegates.

The committee solved several less important questions in a highly efficient way.

In its Supplemental Report the committee stresses its activities in probably its most important duty, namely, the introduction and passage in the State Legislature of House Bill 51, the enabling act, to permit the establishment of medical service plans for the low wage earner. Representative Mahoney introduced the bill and she and Senator Kane are due an earnest vote of thanks from the profession for the able way in which they steered the bill through the Legislature.

The bulk of the work in detail fell on the shoulders of the Legislative Committeemen of the counties, guided by the Sub-Committee on Legislation. These committeemen did heroic work and spent much time at it.

Drs. Hein, Smith, Skipp, and Paryzek were present at all the hearings on the bill and the profession is deeply indebted to them for their time and interest.

As a result of all these activities, the bill was passed by large majorities, signed by the Governor, and will become a law August 5, 1941.

Our committee feels that the Committee on Public Relations and Economics deserves enormous thanks for its onerous and able work of the past year.

The Committee on Education:

For its 1940 course of lectures this committee decided to have three sessions of four lectures each, and the state was divided into ten regional centers instead of five, as previously. The talks were presented ably and as scheduled and, unquestionably, did much good.

The program for this Autumn is not yet definite. However, the committee believes that there should be continuous education of the doctor. For this, as for all their work during the past year, they are to be highly commended.

The Judicial and Professional Relations Committee:

Changes in constitutions and by-laws of some county societies were reviewed by the committee during the past year, with resulting benefit to those societies. The committee feels that it should consider suggested changes to see if they conform in meaning and wording with their actual object. No action was taken on the status of some physicians in certain governmental or teaching positions, pending the decision of the House of Delegates of the American Medical Association, meeting currently.

Our committee feels that the work of the Judicial and Professional Relations Committee is very valuable and important because of its knowledge of basic tenets of the practice of medicine.

Committee on Medical Preparedness:

One of the great accomplishments of this group has been securing the return of a great majority of the questionnaires mailed out by the American Medical Association.

Also, it has had the supervision of the appointment of nearly 1,500 physicians of the state who are voluntarily helping to examine draftees.

This committee has worked hard on these and other problems and we believe it should receive great praise.

Bureau of Public Education:

The work of Mr. R. A. Aszling, director of this Bureau, deserves a separate commendation.

Medical news has been brought to the public by numerous press articles, radio programs and exhibits. Further, this Bureau supplies, on demand, pamphlets and folders, radio scripts and all kinds of data for speakers. It has done a noteworthy job the past year.

Woman's Auxiliary:

This is the first year of this organization and it has grown already to a membership of nearly 1,700. Local auxiliaries have been organized and are functioning in each district.

Our committee feels that a fine start has been made under Mrs. J. Edwin Purdy and her district directors and expects the activities of the Auxiliary to continue and to spread. It recommends the continued active support of the Ohio State Medical Association with this growing organization.

REPORT OF COMMITTEE ON RESOLUTIONS

Carl A. Lincke, Carrollton, chairman, reported for the Committee on Resolutions. President Skipp ruled that the House of Delegates should act on each section of the report as presented. The committee's report was as follows:

The Reference Committee on Resolutions submits the following report on the two resolutions presented at Tuesday's session of the House of Delegates:

Resolution A

Resolution A, introduced by A. A. Brindley, Lucas County, read as follows:

> "WHEREAS, Tuberculosis constitutes a major health problem in Ohio, and
>
> "WHEREAS, The laws of the state include many sections relating to the interests of the state government in controlling and eradicating this disease, now therefore
>
> "BE IT RESOLVED, That a committee be appointed to study the present laws and regulations in the Ohio Code pertaining to tuberculosis;
>
> "That the purpose of this study be to correlate the present laws and regulations into a detailed procedure for the administrative control of tuberculosis as a supplement to House Bill 59, enacted at the recent session of the Legislature;
>
> "That this detailed procedure include definition of the following terms: Open case; contacts; isolations; quarantine; disinfection; removal of case from premises;
>
> "That it include complete regulations providing administrative control measures with special reference to: Reporting all cases within a reasonable length of time; isolation of all active cases; the enforcement of compulsory quarantine and hospitalization where necessary; examination of all contacts; financial measures necessary to carry out the enforcement of the law; removal of case from one area to another; follow-up and rehabilitation; and
>
> "That in drafting the foregoing the following be used as guides: 'A Detailed Procedure for the Administrative Control of Tuberculosis,' issued by the Illinois Department of Health; 'A Compilation of the Laws, Regulations and Agencies Relative to Tuberculosis,' issued by the New York State Department of Health; 'State Laws of Michigan Relating to Tuberculosis Control'."

The Committee on Resolutions recommends that the third paragraph of this resolution be revised to read as follows, and that the **resolution as thereby amended be adopted by the House of Delegates:**

> "BE IT RESOLVED, That the Academy of Medicine of Lucas County recommends to the Ohio State Medical Association that it instruct The Council to study the present laws and regulations in the Ohio Code pertaining to tuberculosis, and suggest to The Council that it direct the Committee on Public Relations and Economics to conduct this study."

On **motion** of Dr. Lincke, seconded by Robt. T. Allison, Jr., Akron, and **carried**, the report of the committee on Resolution A was **adopted.**

Resolution B

Resolution B, introduced by The Council, makes certain recommendations relative to the coordination of preparations for the establishment of medical service plans in Ohio under the provisions of House Bill 51. **(See page 668 for text of resolution.)** Your committee is thoroughly in accord with the purpose of this resolution and believes that its adoption is vitally essential to the orderly establishment of such plans. **It therefore recommends that the resolution be adopted.**

On **motion** of Dr. Lincke, seconded by G. A. Woodhouse, Pleasant Hill, and **carried**, the report of the committee on Resolution B was **adopted.**

On **motion** of Dr. Lincke, seconded by R. R. Hendershott, Tiffin, and **carried**, the report of the Committee on Resolutions as a whole was **adopted.**

ELECTION OF PRESIDENT-ELECT

Nominations for the office of President-Elect were called for by President Skipp.

A. A. Tombaugh, McConnelsville, placed in nomination the name of George F. Swan, Cambridge, completing his second year as Councilor from the Eighth District.

Parke G. Smith, Cincinnati, presented the name of Edward J. McCormick, Toledo, completing his fourth year as Councilor from the Fourth District.

Charles J. McDevitt, Cincinnati, nominated L. Howard Schriver, Cincinnati, Councilor of the First District serving his third year in office. Dr. Schriver withdrew his name as a candidate for the office of President-Elect.

Dr. Swan, with the consent of the member who placed his name in nomination, withdrew in favor of Dr. McCormick.

I. P. Seiler, Piketon, moved that nominations be closed and that Edward J. McCormick, Toledo, be elected President-Elect by the unanimous vote of the House of Delegates. Motion carried. **So recorded and announced.**

President Skipp asked Dr. McCormick to come to the rostrum and officially presented him to the House of Delegates. In accepting the office, Dr. McCormick said in part: "I only hope that I will be able to emulate the example of those who have been presidents of this Association, particularly Dr. Skipp, Dr. Smith, and Dr. Hein. I assure you that I will lend of my time and talents to the end that medicine in Ohio may prosper and I shall work hard to try to justify the confidence that you have placed in me."

ELECTION OF COUNCILORS

Emil R. Swepston, Cincinnati, chairman of the Committee on Nominations, submitted the report of that committee:

Second District—As Councilor the committee presented the name of **D. W. Hogue**, Springfield, to succeed himself. There being no further nominations, **Dr. Hogue was re-elected for a term of two years.**

Fourth District—As Councilor the committee had nominated Edward J. McCormick, Toledo, to succeed himself. Since Dr. McCormick had been elected President-Elect, President Skipp asked for nominations for Councilor of the Fourth District. D. J. Slosser, Defiance, presented the name of **A. A. Brindley**, Toledo. There being no further nominations, **Dr. Brindley was elected for a term of two years.**

Sixth District—As Councilor the committee nominated **R. L. Rutledge**, Alliance, to succeed himself. There being no further nominations, **Dr. Rutledge was re-elected for a term of two years.**

Eighth District—As Councilor the committee presented the name of **George F. Swan** of Cambridge to succeed himself. There being no further nominations, **Dr. Swan was re-elected for a term of two years.**

Tenth District—As Councilor the committee presented the name of **C. C. Sherburne**, Columbus, to succeed himself. There being no further nominations, **Dr. Sherburne was re-elected for a term of two years.**

ELECTION OF A.M.A. DELEGATES AND ALTERNATES

On behalf of the Committee on Nominations, Dr. Swepston then placed in nomination the following delegates and their respective alternates to the American Medical Association for a term of two years—1941-1942:

Delegate—**Barney J. Hein**, Toledo, to succeed himself; Alternate—**Frank M. Wiseley**, Findlay.

Delegate—**Parke G. Smith**, Cincinnati, to succeed C. E. Kiely, Cincinnati, who was not a candidate for re-election; Alternate—**E. O. Swartz**, Cincinnati, to succeed himself.

Delegate—**William M. Skipp**, Youngstown, to succeed Claude B. Norris, Youngstown, who was not a candidate for re-election; Alternate—**Dow Allard**, Portsmouth, to succeed himself.

There being no further nominations from the floor, **the foregoing delegates and alternates were elected.**

INSTALLATION OF NEW PRESIDENT

President Skipp, after expressing appreciation for the help and fine cooperation of the officers and county societies in making his past year successful, presented Harry V. Paryzek, Cleveland, the President-Elect, and installed him as President.

In accepting the official gavel Dr. Paryzek mentioned that it was made from the flagpole carried overseas by the Lakeside Hospital unit, of which he was a member, 24 years ago, and that this pole carried the first American flag to Europe in the last World War. Recalling that the gavel was presented to the Ohio State Medical Association by Dr. George W. Crile in June, 1920, Dr. Paryzek said:

"It impresses me that having served along side of that flagpole for my country I shall serve again along side of it for my profession. It will always remain as a reminder to me that I have a service to perform for medicine and I hope that in this year's time I may give a good account of my stewardship."

As his first official act, President Paryzek called upon Parke G. Smith, Cincinnati, the retiring Past-President, to present Dr. Skipp with the Past-President's gavel. In presenting the gavel to Dr. Skipp, Dr. Smith complimented him on his successful administration, and told him that it was a token of the esteem and trust that was placed in him during the year as President of the Association, and a symbol of the highest honor that the members of the Ohio medical profession can bestow on one of their colleagues.

APPOINTMENT OF COMMITTEES

President Paryzek then announced the appointment of the following committee members, which appointments, on **motion** of A. A. Brindley, Toledo, seconded by R. L. Rutledge, Alliance, and **carried**, were **officially confirmed** by the House of Delegates:

Committee on Public Relations and Economics—**H. M. Platter**, Columbus, to succeed himself for a term of five years. **Chairman** for the ensuing year—**Barney J. Hein**, Toledo.

Committee on Education—**J. Edwin Purdy**, Canton, for a term of five years. **Chairman** for the ensuing year—**Clyde L. Cummer**, Cleveland.

Committee on Scientific Work—**Charles A. Doan**, Columbus, for a term of five years. **Chair-**

man for the ensuing year—**Max M. Zinninger**, Cincinnati.

Judicial and Professional Relations Committee—James G. Kramer, Akron, to succeed himself for a term of five years and to serve as **chairman** for the ensuing year.

MISCELLANEOUS BUSINESS

On **motion** by William M. Skipp, Youngstown, seconded by D. W. Hogue, Springfield, and **carried** the House of Delegates thanked the members of the Cleveland Academy of Medicine for the hospitality extended by them during the Annual Meeting.

Following special announcements, the House of Delegates adjourned sine die.

Attest: GEORGE H. SAVILLE,
Asst. Executive Secretary.

House of Delegates Roll Call
95th Annual Meeting

County	Delegate	First Session	Second Session
Adams	S. J. Ellison	present	present
Allen	J. R. Tillotson	present	present
Ashland	M. D. Shilling	present	present
Ashtabula	R. B. Wynkoop	present	present
Athens	C. N. Sanders	present	present
Auglaize	Chas. C. Berlin	present	present
Belmont	L. L. Liggett	present	present
Brown	Geo. P. Tyler, Jr.	—	—
Butler	Chas. T. Atkinson	present	present
Carroll	Carl A. Lincke	present	present
Champaign	D. C. Houser	present	present
Clark	Lillian Posch	present	present
Clermont	John T. Crone, Jr.	present	—
Clinton	Robert Conard	present	present
Columbiana	J. A. Fraser	present	present
Coshocton	J. G. Smailes	—	—
Crawford	E. C. Brandt	present	present
Cuyahoga	Chas. T. Way	present	present
"	C. E. Kinney	present	present
"	John E. Rauschkolb	present	present
"	A. Strauss	present	present
"	Ralph M. Watkins	present	present
"	E. F. Kieger	present	present
"	M. Paul Motto	present	present
"	Wm. E. Hill	present	present
"	M. F. Oman	present	present
"	D. S. Spreng	present	present
"	A. Carlton Ernstene	present	present
"	James T. Collins	present	present
"	B. B. Larsen	present	—
Darke	C. I. Stephen	—	—
Defiance	D. J. Slosser	present	present
Delaware	M. W. Davies	—	—
Erie	Ross M. Knoble	present	present
Fairfield	Chas. B. Crow	—	—
"	C. P. Swett	—	present
Fayette	James F. Wilson	present	present
Franklin	John M. Thomas	present	—
"	George T. Harding	present	present
"	E. J. Emerick	present	present
"	I. B. Harris	present	present
"	Russel G. Means	present	present
"	L. L. Bigelow	—	—
Fulton	R. W. Reynolds	—	—
Gallia	Francis W. Shane	present	present
Geauga	Lucy S. Hertzog	present	—
"	C. F. Gilmore	—	present
Greene	H. C. Messenger	present	—
Guernsey	Fred W. Lane	present	present
Hamilton	Howard D. Fabing	present	present
"	Ralph W. Eddy	present	present
"	Emil R. Swepston	present	present
"	Carroll J. Fairo	present	present
"	David W. Heusinkveld	—	—
"	Lloyd B. Johnston	present	present
"	Charles J. McDevitt	present	present
"	E. O. Swartz	present	present
Hancock	Frank M. Wiseley	present	present
Hardin	Don R. Printz	—	—
Harrison	Carl F. Goll	present	present
Henry	J. J. Harrison	—	—
Highland	H. W. Chaney	present	present
Hocking	Allan A. Cole	—	—
Holmes	Luther W. High	—	—
Huron	J. D. Bradish	present	—
Jackson	Wm. R. Riddell	present	present
Jefferson	S. J. Podlewski	present	present
Knox	F. C. Anderson	—	—
Lake	V. N. Marsh	—	present
Lawrence	W. F. Marting	present	present
Licking	George A. Gressle	present	present
Logan	F. Blair Webster	—	—
Lorain	Charles R. Meek	present	present
"	A. S. McKitrick	present	present
Lucas	A. A. Brindley	present	present
"	E. G. Galbraith	present	—
"	R. C. Young	present	present
"	F. N. Nagel	present	present
"	Fred M. Douglass	—	present
Madison	Herman E. Karrer	—	—
Mahoning	Gordon G. Nelson	present	present
"	Dean Nesbit	present	present
"	Edward J. Reilly	—	—
"	O. J. Walker	—	present
Marion	Floyd D. Yeager	—	—
Medina	H. T. Pease	present	present
Meigs	P. A. Jividen	present	present
Mercer	R. B. Benning	—	—
Miami	G. A. Woodhouse	present	present
Monroe	A. R. Burkhart	—	—
Montgomery	Paul L. Yordy	present	present
"	C. J. Derby	—	—
"	Ralph D. Dooley	present	—
"	A. W. Carley	present	present
Morgan	A. A. Tombaugh	present	present
Morrow	Wm. Lowell Murphy	—	—
Muskingum	M. A. Loebell	present	present
Ottawa	L. L. Belt	present	present
Paulding	L. R. Fast	present	present
Perry	James Miller	—	—
Pickaway	A. D. Blackburn	—	—
Pike	L. E. Wills	—	—
Portage	John M. Painter	—	—
Preble	G. W. Flory	present	present
Putnam	W. D. Hickey	present	present
Richland	John S. Hattery	—	—
Ross	O. P. Tatman	present	present
Sandusky	T. R. Cunningham	—	—
Scioto	G. R. Micklethwaite	present	present
Seneca	R. R. Hendershott	present	present
Shelby	R. W. Alvis	—	—
Stark	George N. Wenger	present	present
"	A. R. Basinger	present	present
"	J. Edwin Purdy	present	present
Summit	Robt. T. Allison, Jr.	present	present
"	Harvey H. Musser	present	present
"	Carl R. Steinke	present	present
Trumbull	R. D. Herlinger	present	—
Tuscarawas	J. W. Calhoon	present	—
Union	James M. Snider	present	present
Van Wert	J. R. Jarvis	present	present
Vinton	H. D. Chamberlain	—	present
Warren	N. A. Hamilton	—	—
Washington	R. M. Meredith	present	—
Wayne	R. C. Paul	present	present
Williams	H. W. Wertz	present	—
Wood	Paul F. Orr	present	present
Wyandot	J. Craig Bowman	present	present
	OFFICERS		
President	William M. Skipp	present	present
President-Elect	Harry V. Paryzek	present	present
Past-President	Parke G. Smith	present	present
Treasurer	James A. Beer	present	—
	COUNCILORS		
First District	L. Howard Schriver	present	present
Second District	D. W. Hogue	present	present
Third District	Guy E. Noble	present	present
Fourth District	E. J. McCormick	present	present
Fifth District	Edgar P. McNamee	present	present
Sixth District	R. L. Rutledge	present	present
Seventh District	Carl Goehring	—	—
Eighth District	George F. Swan	present	present
Ninth District	I. P. Seiler	present	present
Tenth District	C. C. Sherburne	present	present
Eleventh District	S.V. Burley	present	present
Totals		107	100

Cincinnati—Dr. Emil R. Swepston has been appointed lieutenant-colonel and regimental surgeon of the new First Regiment, Ohio State Guard.

Officers, Councilors, Committeemen and A.M.A. Delegates of the State Association for the Year, 1941-1942

THE following officers, councilors, members of standing committees and delegates and alternates to the American Medical Association will serve the State Association during the ensuing year, as a result of the action by the House of Delegates at its meeting in Cleveland, June 3-4. Personnel of various sub-committees will be selected at the next meeting of The Council:

OFFICERS

President	Harry V. Paryzek, Cleveland
President-Elect	Edward J. McCormick, Toledo
Past-President	Wm. M. Skipp, Youngstown
Treasurer	James A. Beer, Columbus

DISTRICT COUNCILORS

First District	L. Howard Schriver, Cincinnati
Second District	D. W. Hogue, Springfield
Third District	Guy E. Noble, St. Marys
Fourth District	A. A. Brindley, Toledo
Fifth District	Edgar P. McNamee, Cleveland
Sixth District	Ralph L. Rutledge, Alliance
Seventh District	Carl Goehring, Steubenville
Eighth District	George F. Swan, Cambridge
Ninth District	I. P. Seiler, Piketon
Tenth District	C. C. Sherburne, Columbus
Eleventh District	S. V. Burley, Lorain

A.M.A. DELEGATES	A.M.A. ALTERNATES
Ben R. McClellan, Xenia	G. A. Woodhouse, Pleasant Hill
Carl R. Steinke, Akron	C. C. Sherburne, Columbus
E. R. Brush, Zanesville	Carl Goehring, Steubenville
John B. Alcorn, Columbus	R. R. Hendershott, Tiffin
Barney J. Hein, Toledo	Frank M. Wiseley, Findlay
Parke G. Smith, Cincinnati	E. O. Swartz, Cincinnati
Wm. M. Skipp, Youngstown	Dow Allard, Portsmouth

STANDING COMMITTEES

Committee on Public Relations and Economics—Barney J. Hein, Toledo, chairman; H. M. Platter, Columbus; O. J. Walker, Youngstown; E. O. Swartz, Cincinnati; Ralph M. Watkins, Cleveland; the President, the President-Elect, and the Past-President.

Committee on Education—Clyde L. Cummer, Cleveland, chairman; J. Edwin Purdy, Canton; J. L. Webb, Nelsonville; S. H. Ashmun, Dayton; Carl A. Wilzbach, Cincinnati.

Committee on Scientific Work—M. M. Zinninger, Cincinnati, chairman; Charles A. Doan, Columbus; Earl W. Huffer, Toledo; Fred W. Dixon, Cleveland; Claude B. Norris, Youngstown.

Judicial and Professional Relations Committee—James G. Kramer, Akron, chairman; Phillip T. Knies, Columbus; Howard D. Fabing, Cincinnati; J. E. Tuckerman, Cleveland; G. A. Woodhouse, Pleasant Hill.

Proceedings of The Council

Business Transacted at Two Meetings Held During the 95th Annual Meeting of the State Association, June 3-4, at Cleveland

A REGULAR meeting of The Council of the Ohio State Medical Association was held at Hotel Cleveland, Cleveland, on June 3, 1941, with the following officers and councilors present: President Skipp, President-Elect Paryzek, Treasurer Beer; Drs. Schriver, Hogue, Noble, McCormick, McNamee, Rutledge, Swan, Seiler, Sherburne, and Burley. The meeting was attended also by Dr. R. R. Hendershott, a Past-President; Assistant Executive Secretary Saville, and Director of Public Education Aszling.

Dr. Skipp announced that Executive Secretary Nelson was unable to attend the meeting because of illness. On **motion** of Dr. Swan, seconded by Dr. Seiler and **carried**, the President was directed to send a telegram to Mr. Nelson expressing the regret of The Council that he could not be at the meeting and wishing him an early recovery.

The minutes of the last meeting of The Council, held on February 16, 1941, were **approved** as published in the March, 1941, issue of *The Journal*, on **motion** of Dr. Paryzek, seconded by Dr. Schriver and **carried.**

Membership—Membership statistics were reported as follows: **Membership as of June 3, 1941—6,311, compared to 6,203 as of the same date a year ago and to 6,475 as of December 31, 1940.** It was pointed out that the membership figure of 6,311 included 226 members whose dues had been waived or refunded because of their military service.

The Council considered the Supplemental Report of the Committee on Public Relations and Economics with a review of the recent session of the 94th Ohio General Assembly, as published in the June, 1941, issue of *The Journal.* On **motion** of Dr. McCormick, seconded by Dr. Swan and **carried,** The Council **approved** the report and expressed its appreciation to the officers of the State Association and members of the Headquarters Staff for the excellent work which they did on legislation.

RESOLUTION ADOPTED

Following a discussion of future procedure in view of the enactment of House Bill 51, The Council on **motion** of Dr. McCormick, seconded by Dr. Noble and **carried, adopted** the following resolution for presentation to the House of Delegates:

"Enactment of House Bill 51 by the 94th Ohio General Assembly and the signing of the measure by Governor Bricker, making it effective August 5 of this year, provides the medical profession of Ohio with an opportunity to take the initiative in the formation of what can eventually be one of the most beneficial health programs ever planned or established in the State of Ohio.

"For several years, the medical profession of Ohio has recognized the need for a joint endeavor by members of the medical profession and low wage earners in inaugurating a plan whereby the benefits of modern medicine can be made more readily available to this group of citizens.

"Through the passage of House Bill 51, a sound legal basis for the organization and operation of voluntary non-profit medical service plans for urban and rural low wage earners has been established.

"The medical profession sponsored this enabling legislation in the General Assembly. It presented sound and logical reasons for asking the General Assembly to make House Bill 51 a law. It has pointed out to the public many of the benefits which will accrue to a large group of citizens if they will cooperate with the medical profession in setting up medical service plans where they are needed and there is a public demand for them.

"Obviously, the responsibility for initiating one or several plans must be vested in some reliable agency, group or organization, having the facilities to work out the innumerable details which organization of a plan will entail. The medical profession of Ohio through its state organization and its 88 component medical societies can, and should, undertake this responsibility.

"A number of the larger medical societies of the state have drafted, or are drafting, medical service plans to operate in their respective communities. Several additional societies are giving serious consideration to this question.

"Therefore, it would seem appropriate and timely for the House of Delegates of the Ohio State Medical Association, meeting in Cleveland, June 3 and 4, 1941, to adopt the following recommendations on this general subject, to serve as a guide for the State Association, as well as its component local societies. We recommend:

"1. That the incoming President, Dr. Paryzek, appoint a special committee, working under the jurisdiction of The Council, to serve as an advisory agency and to which the component medical societies may come for information and counsel. Authority to name such a committee is hereby given to Dr. Paryzek.

"2. That all the facilities of the State Association, subject to the approval of The Council, be made available to component medical societies undertaking the organization and operation of medical service plans under the provisions of House Bill 51.

"3. That a component medical society proceed carefully in preparing the basic structure for its medical service plan. All provisions of House Bill 51 should be met. Advice of the Superintendent of Insurance and his staff should be sought. Data on the experience of medical service plans in other states should be assembled and studied. Competent legal counsel should be employed. The cooperation and assistance of influential citizens of the community should be solicited.

"4. That each component medical society before putting a medical service plan into operation, submit a draft of the plan, together with supplemental documents, to the special committee of the State Association, authorized under Recommendation 1, for review and comments. This suggestion is made for the purpose of achieving, if possible, a reasonable degree of uniformity and standardization in medical service plans throughout the state. Perhaps complete uniformity can not be accomplished but an effort should be made in that direction. Moreover, mistakes in policy or errors in technique may be avoided through this procedure of having a central, competent board of review pass on tentative plans.

"We believe if the foregoing recommendations are made effective, the formation of medical service plans in Ohio can be initiated and carried on in an orderly, systematic manner, producing a favorable reaction on the part of the public generally and enabling this new health program to make a sound beginning."

REPORT OF JUDICIAL AND PROFESSIONAL RELATIONS COMMITTEE APPROVED

The following report from the Judicial and Professional Relations Committee, presented to The Council on behalf of Dr. Kramer, chairman of that committee, was **approved** on **motion** by Dr. McCormick, seconded by Dr. Sherburne and **carried**:

"Since the last meeting of The Council, the Judicial and Professional Relations Committee has had under consideration three questions submitted to the State Association by component medical societies. The committee, at this time, submits for consideration and action by The Council the following recommendations on these matters:

"1. Prior to the last meeting of The Council, held on February 16, the Cincinnati Academy of Medicine adopted an amendment to its constitution and by-laws reading as follows:

> " '**Section 7. Inactive Membership.** Active members of the Academy of Medicine who are engaged in active service in any branch of the United States Military Service may be transferred to inactive membership, with remission of dues, for such a period of service, subject to a discretionary vote by Council in each individual case. Active members desiring such transfer shall be required to make formal application in writing to Council giving details as to term, kind and location of military service to be given.'

"According to custom, The Council referred this matter to the Judicial and Professional Relations Committee for study. Your committee recommends that The Council **not approve** the Cincinnati amendment as worded for the reason that it would place members of the Cincinnati Academy, engaged in active military service in an inactive membership classification which would have the effect of disqualifying such members from active membership in the Ohio State Medical Association during their period of service.

"Inasmuch as many Ohio physicians have been called into active military service, and no doubt many more will be called during the ensuing months, and inasmuch as other component medical societies undoubtedly have considered or are considering the question of waiving annual local dues for such members during the period of their military service, the Judicial and Professional Relations Committee has deemed it advisable to submit for the consideration of The Council the following alternative recommendations for the guidance of component medical societies:

"a. In event a county medical society desires to remit or waive annual dues for active members called into active military service and keep such members on an active membership status, we suggest that such county society make a careful analysis of its constitution and by-laws to ascertain if authority to remit or waive annual dues is vested in the council or some other official body of the society, or if such action can be taken by the society in regular session. Should a county medical society determine that such action can be taken by an official body of the society or the society as a whole, the matter can be handled adequately through the adoption of a properly worded resolution at some regular meeting of the society.

"b. On the other hand, if a society should decide that dues can not be remitted or waived without amendments to the constitution and by-laws of the society, we recommend that the society consider the adoption of an amendment to the article or chapter of the constitution or by-laws relating to dues and assessments reading as follows:

> " 'If authorized by the council (the word "society" may be inserted here if desired), members engaged in active service in any branch of the United States Military Service and who were in good standing during the preceding calendar year shall be exempted from the payment of local dues during their period of military service. Such members shall be entitled to the remission of current dues which may have been paid to the secretary-treasurer of the society prior to the time they entered military service. This same provision shall apply to acceptable applicants for membership who have just completed their medical education or who were otherwise ineligible for membership prior to the beginning of the calendar year during which they were called for active military service.'

"It is the opinion of your committee that the adoption of either of the above procedures would accomplish the purpose of a society desiring to waive or remit annual local dues for members in the military service and at the same time would protect the active membership status of such members in the Ohio State Medical Association and the American Medical Association.

"If these recommendations are approved by The Council, we suggest that they be transmitted to the Cincinnati Academy of Medicine and that the Cincinnati Academy be respectfully requested to reconsider its previous action and adopt an amendment in accordance with one of the recommendations.

"2. Several amendments to the constitution and by-laws of the Miami County Medical Society have been submitted to the State Association for approval.

"The purpose of these amendments is to provide that a duly licensed physician who has not obtained full citizenship shall not be eligible to membership in the Miami County Medical Society until he has engaged in the practice of medicine and has been a resident of Miami County for at least one year prior to the date of the filing of his application for membership.

"The Judicial and Professional Relations Committee finds nothing in these amendments in conflict with the Constitution and By-Laws of the Ohio State Medical Association and, therefore, recommends that they be **approved** by The Council.

"3. On April 1, 1941, the Summit County Medical Society adopted a series of amendments to the constitution and by-laws of that society.

"These amendments are simply clarifying amendments dealing with the procedure for nominating and electing officers, and with the appointment and duties of various committees.

"Inasmuch as the Judicial and Professional Relations Committee finds nothing objectionable in the amendments or in conflict with the provisions of the Constitution and By-Laws of the State Association, it recommends that the amendments adopted by the Summit County Medical Society be **approved** by The Council."

COMMITTEE ON MEDICAL PREPAREDNESS

Dr. Paryzek, chairman of the Committee on Medical Preparedness, reported on the various activities of that committee. He stated that all but 10 counties in the state had completed the A.M.A. questionnaire with information on the minimum number of physicians needed in each county for the maintenance of health and medical services for the civilian population. Dr. Paryzek also reported on the effort made by the State Committee on Medical Preparedness, through the local committees, to obtain deferment of medical students. He stated that the draft boards throughout the state had been most cooperative in meeting this problem. Dr. Skipp thanked Dr. Paryzek, on behalf of The Council, for the excellent work which had been done by him and his committee. On **motion** of Dr. McNamee, seconded by Dr. Noble and **carried**, the report of the Committee on Medical Preparedness was accepted.

MISCELLANEOUS BUSINESS

Dr. H. M. Clodfelter, Columbus, who represented the Ohio State Medical Association at the conference of the Governor's Committee on Follow-Up of the White House Conference, held at Columbus on April 2 and 3, gave The Council a verbal report of that meeting. (See June, 1941, issue of *The Journal*, pages 584-585.) He emphasized the importance of members of the medical profession taking an active part in such conferences, pointing out that medical men should adopt the role of guides rather than observers in these meetings. On **motion** of Dr. Sherburne, seconded by Dr. McNamee and **carried**, The Council gave Dr. Clodfelter a vote of thanks for his interesting report.

Dr. Sherburne reported on the Conference on Physical Fitness for National Defense, held by the American Legion of Ohio at Columbus on March 29, which he attended as a representative of the Columbus Academy of Medicine and the Ohio State Medical Association. On **motion** of Dr. Paryzek, seconded by Dr. McNamee and **carried**, the report of Dr. Sherburne was accepted with an expression of thanks from The Council.

Dr. Sherburne, chairman of the Committee on Auditing and Appropriations, presented a review of the annual audit of the books of the State Association and *The Journal*, made by a Columbus firm of certified public accountants and published in the May, 1941, issue of *The Journal*. On **motion** of Dr. McNamee, seconded by Dr. Seiler and **carried**, the audit was accepted and **approved.**

A report by Dr. Beer, the Treasurer, on reinvestment of the reserve funds of the Association was accepted and **approved**, on **motion** of Dr. Seiler, seconded by Dr. Rutledge, and **carried.**

On **motion** of Dr. Beer, seconded by Dr. McCormick and **carried**, The Council authorized the prorating of dues for new members for the third and fourth quarters of the current year on the following basis: July 1 to September 30—$5.00; October 1 to December 31—$3.00.

A communication was read from Miss Hazel C. McIntire, director of the Division of Special Education, State Department of Education, Columbus, asking for the appointment of an advisory committee to assist the Division in regard to policy and procedure on medical questions. On **motion** of Dr. McCormick, seconded by Dr. Rutledge and **carried**, the President was authorized to appoint such an advisory committee.

A report was made to The Council on the present status of a certain ethical problem which had been referred to the Association by the American Medical Association and transmitted to a local county medical society for attention.

On **motion** of Dr. Sherburne, seconded by Dr. Swan and **carried**, The Council extended a vote of appreciation to Dr. Skipp for his services during the past year and directed that flowers be sent to Mrs. Skipp and to Mrs. Paryzek (wife of Dr. Paryzek, the incoming President).

The Council then recessed to meet with the House of Delegates, Tuesday afternoon, June 3, at 4:00 o'clock.

Attest: GEORGE H. SAVILLE,
Asst. Executive Secretary.

SPECIAL MEETING

A special meeting of The Council was held on Wednesday, June 4, 1941, following the final session of the House of Delegates. Dr. A. A. Brindley, the new Councilor for the Fourth District, was introduced to members of The Council.

The Council confirmed the reappointment by Dr. Paryzek, the President, of Dr. Sherburne, chairman, and Dr. McNamee on the Committee of Auditing and Appropriations and the appointment of Dr. Schriver to succeed Dr. McCormick, the President-Elect.

The Council then adjourned to meet at the call of the President.

Attest: GEORGE H. SAVILLE,
Asst. Executive Secretary.

Our Present Dilemma

HARRY V. PARYZEK, M.D., CLEVELAND, OHIO
President, Ohio State Medical Association

SINCE the adoption by the State Legislature of the Enabling Act which provides a legal basis for certain changes in the practice of medicine as related to those individuals in the low-income levels, it has been adversely criticized by some members of the medical profession. This departure from the time-honored method of practice is an attempt on the part of organized medicine to offer a solution to a very difficult and pertinent problem, so it behooves all members of the profession to seriously consider the portent and purpose of this law.

For several years the medical profession has been maligned and criticized for its alleged lack of vision and ability to solve current economic problems intimately associated with the practice of medicine. Much emphasis has been placed on the mounting costs of medical care which prohibits adequate care to individuals in low-income groups. Serious attempts are being made by various social groups to introduce changes which are distinctly contrary to our basic methods of practice. Many of these groups have resorted to pernicious propaganda in their attempt to disorganize our profession and force the acceptance of a substitute which entails group practice controlled by laymen or outright governmental control.

The Federal Government, in its attempt to promote public health, is seriously considering the adoption of a socialized scheme of practice which, we all agree, would be most detrimental to the public as well as the profession.

Our profession, based as it is on sound principles and prompted by an insatiable desire to conquer disease and ameliorate suffering, frequently loses sight of the changes which are taking place throughout the world. The experience of the last eight years shows a gradual trend towards governmental control of the utilities and of big and little industries. The introduction of governmentally-controlled social reforms have produced definite changes in our economic life. To ignore these factors which are intimately associated with our particular endeavor is foolhardy; and to disregard the thought that we as a profession are immune to governmental control suggests wishful thinking.

No longer is it possible for medical organization to stand up for its sacred traditions and privileges and maintain a negative attitude. Recent events in Washington give us some conception of the utter futility of adopting a conservative attitude without appreciating the fact that changes are taking place which we, as a profession, should be intelligent enough to recognize and at least recommend some solution.

Scientific advancement in medicine is largely accomplished by the method of trial and error. In our daily rounds we are constantly making careful observations at the bedside and attempt by deductive reasoning to arrive at a definite conclusion as to what is best for our patient. Apart from this particular endeavor, many of us are prone to stop thinking and with utmost conservatism carry on in our work, disregarding the more potential factors which will in time play an important part in our economic status. It is, therefore, just as important for us to recognize and appreciate changes in our economic system, and as intelligent men, propose methods which will retain basic principles without dislocating our status and above all, which will maintain and foster the American Way of practicing medicine.

The Council and officers of the Ohio State Medical Association in studying and analyzing these various changes, fully realize their importance and recognize the fact that they must be ready to propose procedures which will be to the best interest of the public as well as the profession. Accordingly, they formulated an Enabling Act and promoted its passage, permitting the establishment of medical care plans by the medical profession for individuals in the low-income groups. Opposition to the passage of the bill was intensive and well-organized. Opponents propounded arguments against the passage of the bill because they realized that the medical profession was at last supporting legislation which will retard the solicitious interest of lay groups in the practice of medicine. Careful study of the Enabling Act reveals definite safeguards which must at all times be maintained in order that the subscriber's privileges under any form of plan will be carefully guarded.

To assume that socialized medicine is inevitable is to assume a defeatist's attitude which will hasten the change. To view the entire problem, however, in its true light and to approach the apparent difficulties with poise, courage and good common sense, bespeaks of genuine courage and fearlessness of a united profession.

A cursory perusal of the changes taking place in the field of industry and business reveals a tendency on the part of their leaders to accept these changes since they realize they are but a small factor in this changing economic pattern and, therefore, deem it advisable to preserve some degree of individuality as industrialists and business men. By this procedure they have been able to forestall complete governmental control.

We are facing similar problems in our profession and it is, therefore, essential that as an organized body, we must assume leadership. These problems must be approached in an unprejudiced fashion. Plans and proposed changes must receive careful and serious consideration in order that certain fundamental principles be preserved. We must realize that we are in the midst of a social revolution and that by having implicit faith in our principles, we can formulate a solution which will be practical and still not jeopardize the welfare of the public and the profession.

Although we, as a profession, are a group of individualists, we must set aside selfish motives and carefully evaluate our problem in the clear light of reason. Our duty to the public must not fail at the present time since dedicated as we are to serve the public, we must set an example of courage and leadership which will have as its ultimate aim better medical service for all.

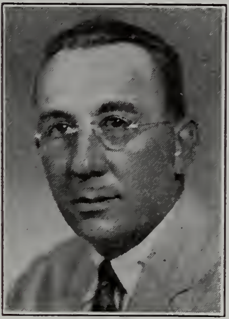
It is illogical to reject the idea of a medical care plan as impractical and dangerous without attempting to set up such a plan as an experiment for the purpose of making a careful analysis of all features which may be good or bad. By such a procedure, discrepancies and difficulties can be corrected.

As we proceed, however, we must keep one thing in mind. We should not act with undue haste but must avoid premature action and publicity. A concentrated educational program among members of the medical profession must be carried on by any local medical society contemplating the setting up of a medical care plan for those of low income and before the details of a proposed plan are presented to its membership. Members cannot be expected to vote intelligently on a plan until they are familiar with its purposes. Once all members of a medical society are properly informed on the subject, the problem of getting official approval and getting a plan started will be greatly simplified and there will be more assurance of approval of the idea by such members.

I am confident that after the members of this Association have considered this problem seriously and intelligently, the overwhelming majority will not fail to give their wholehearted support and cooperation.

A bill sponsored by the Massachusetts Medical Society, and designed to permit the formation of corporations to provide means for meeting the cost of medical care on a non-profit insurance basis, was recently passed by the Massachusetts legislature and signed by Governor Saltonstall on May 22, the day of the celebration of the 116th anniversary of the Society.

Dr. Brindley, Toledo, New Councilor, Is Experienced Worker in Medical Organization



DR BRINDLEY

The House of Delegates of the Ohio State Medical Association at its 95th Annual Meeting in Cleveland, June 3-4, recognized the qualifications of Dr. A. A. Brindley, Toledo, for many years of active service in behalf of organized medicine, when it elected him Councilor for the Fourth District, succeeding Dr. Edward J. McCormick, Toledo, who was named President-Elect.

Born in Swanton, Ohio, January 26, 1890, Dr. Brindley graduated from Jefferson Medical College, Philadelphia, in 1912. He received his pre-medical education at West Virginia University. Following special training at the New York Postgraduate Medical School, Dr. Brindley opened an office in Swanton. While there he served as president and also secretary of the Fulton County Medical Society. In 1919, Dr. Brindley located in Port Clinton and served successively as secretary and president of the Ottawa County Medical Society. Since 1925 he has been practicing in Toledo, specializing in anesthesia. His hospital staff connections include senior anesthetist, Douglass Surgical Service, and staff anesthetist at St. Vincent's, Toledo and Robinwood Hospitals.

Dr. Brindley maintained his interest in the activities of medical organization when he moved to Toledo. He has represented the Toledo Academy of Medicine in the House of Delegates of the Ohio State Medical Association; has been Chairman of the Legislative Committee; member of the Council of the Academy; and member at various times of other important committees of the Academy. For several years Dr. Brindley has been a member of the Legislative Committee of the State Association. He was Chairman of the Committee on Local Arrangements for the Annual Meeting held in Toledo in 1939.

A Fellow of the American Medical Association, Dr. Brindley is also a member of the local and state anesthetist societies, a member of the American Society of Anesthetists and Fellow of the International College of Anesthetists.

Dr. Brindley is also active in the community life of Toledo. He is a member of the Lutheran Church; Kiwanis Club, of which he is a director; various Masonic Orders; Elks' Lodge; Toledo Club, and the Heatherdowns Country Club. Dr. Brindley is the examining physician for Lucas County Selective Service Board No. 6. He resides at 1920 Mt. Vernon Avenue with Mrs. Brindley and their son and daughter.

Several Thousand Ohio Physicians Attend A.M.A. Session at Cleveland; Business Transactions and Program Reviewed

REGISTRATION of 2,372 Ohio physicians at the 92nd annual session of the American Medical Association, held in Cleveland, June 2-6, is ample evidence that the profession of the state took an active interest in this great medical meeting. The Cleveland sessions were considered highly successful by all who attended, and leaders in the profession agree that members of the Ohio State Medical Association and the Cleveland Academy of Medicine, as co-hosts to the nation's physicians, may feel justifiably proud. The total registration was 7,269, about 1,200 more than at the 1934 Cleveland session.

Ohio's seven delegates to the American Medical Association—Dr. Barney J. Hein, of Toledo; Dr. C. E. Kiely, of Cincinnati; Dr. Claude B. Norris, of Youngstown; Dr. Ben R. McClellan, of Xenia; Dr. Carl R. Steinke, of Akron; Dr. E. R. Brush, of Zanesville; and Dr. John B. Alcorn, of Columbus—were present and took part in the deliberations of the House of Delegates. Dr. H. H. Shoulders, speaker, appointed four Ohio delegates to reference committees: Dr. Hein, Sections and Section Work; Dr. Steinke, Medical Education; Dr. Brush, Amendments to Constitution and By-Laws; and Dr. Kiely, Miscellaneous Business.

DR. HADEN AN APPOINTEE

Dr. Russell Haden, former president of the Cleveland Academy of Medicine, was elected to the Council on Medical Education and Hospitals, to fill the vacancy created when Dr. Fred W. Rankin, of Lexington, Ky., was named president-elect of the A.M.A. The House of Delegates awarded the Distinguished Service Medal of the A.M.A. to Dr. James Ewing, of New York, noted pathologist.

The Committee on Local Arrangements, a group of 33 Cleveland physicians under the chairmanship of Dr. Clyde L. Cummer, has been mentioned as deserving of high praise and credit in editorials of *The Journal of the A.M.A.* Dinners given for the Trustees and the House of Delegates by the Cleveland Academy and the State Association were said by the editorial to be "on a dignified plane, again perfectly arranged with the provision of delightful entertainment and exceptional cuisine."

OHIOANS WIN AWARDS

Also hailed as of high scientific value was the special program by Cleveland physicians which was given on the afternoon of the opening day in the Music Hall of the Public Auditorium. A total of more than 125 Ohio physicians took part in the general scientific program as essayists, exhibitors, demonstrators, and discussants.

One of the outstanding featutres of the convention was the scientific exhibit. Arranged on the Arena Floor of the Public Auditorium, the more than 250 exhibits and motion pictures were universally conceded to set a new high in educational value. The Committee on Awards singled out a number of Ohio exhibitors to receive certificates of merit and other distinctions. Among them were the following: Dr. Charles Higgins, of the Cleveland Clinic; Dr. Walter A. Hoyt, Dr. Adrian E. Davis, and Dr. George Van Buren, of Akron Children's Hospital, certificates of merit in Group I; Dr. Robert E. Kehoe, of the University of Cincinnati College of Medicine; Dr. John T. Murphy and Dr. C. E. Hufford, of Toledo, certificates of merit in Group II; Dr. E. Perry McCullagh, Dr. E. J. Ryan, and Dr. D. Roy McCullagh, of the Cleveland Clinic, honorable mention in Group I; Dr. Albert D. Ruedemann, honorable mention in Group II; Dr. Howard Dittrick, of the Cleveland Medical Library, and Dr. Russell L. Haden and Dr. Joseph Lucas, of the Cleveland Clinic, special certificates of merit for historical exhibits. Dr. Walter M. Simpson, of Dayton, served as chairman of the Committee on Awards.

GOVERNOR LAUDS OHIO PROFESSION

Speaking at the opening general meeting of the 92nd annual session, Governor John W. Bricker welcomed the physicians to Ohio and expressed very warm regard for the profession of the state and its State Association. He said he hoped that the officials of other states had found their local medical professions as cooperative as he had and that the physicians of Ohio were deserving of special credit for responding so wholeheartedly to the demands of the current national emergency.

As president of the Ohio State Medical Association, Dr. William M. Skipp, of Youngstown, gave a brief welcome address from the profession of the state at this opening session as well as at dinners of the Board of Trustees and the House of Delegates.

OFFICERS ELECTED

The House of Delegates installed Dr. Frank Lahey, of Boston, as president for 1941-42, succeeding Dr. Nathan B. Van Etten, of New York. Dr. Lahey will in turn be succeeded by the new president-elect, Dr. Rankin, at the 1942 meeting in Atlantic City. The House also voted to hold the 1944 meeting in St. Louis, it having been decided last year to meet in San Francisco in 1943. Dr. Charles A. Dukes, of Oakland, Calif., was elected vice president, succeeding Dr. Parke G. Smith, of Cincinnati. Dr. Olin West and Dr.

Herman L. Kretschmer, both of Chicago, were re-elected secretary and treasurer, respectively.

Also elected to office were the following: Dr. H. H. Shoulders, of Nashville, Tenn., speaker of the House; Dr. Roy W. Fouts, Omaha, vice speaker; Dr. Charles W. Roberts, of Atlanta, Board of Trustees, term expiring in 1946; Dr. Ernest E. Irons, of Chicago, Board of Trustees, term expiring in 1943; Dr. Walter F. Donaldson, of Pittsburgh, Judicial Council, term expiring in 1946; Dr. Harvey B. Stone, of Baltimore, Council on Medical Education and Hospitals, term expiring in 1948; and Dr. Frederick A. Coller, of Ann Arbor, Mich., Council on Scientific Assembly, term expiring in 1946.

PREPAREDNESS PLANS DISCUSSED

As was expected, the related themes of national defense and medical preparedness were dominant among the actions of the House of Delegates. In executive session it voted to petition the federal government to set up immediately a central coordinating authority to be known as the Procurement and Assignment Agency for physicians for the Army, Navy, Public Health Service, civilian, and industrial needs of the nation.

Noting that many more laymen than physicians are serving on draft boards of the Selective Service System and that the profession had pledged patriotic cooperation in the national emergency, the House of Delegates turned down several resolutions which would have urged that physicians be compensated for examinations of draftees.

Also in executive session the Delegates heard a report on the anti-trust action of the United States versus the American Medical Association and voted unanimously to recommend to the Board of Trustees that the attorneys for the Association be instructed to appeal the verdict of guilty which was handed down by the federal district court.

NEXT SESSION IN ATLANTIC CITY

The House voted to make the Atlantic City meeting next year a "Pan-American Session" and to extend invitations to physicians in all North and South American countries to attend and take part.

The Delegates also passed a resolution urging that the A.M.A. serve as a coordinating center for the further study of prepayment medical and hospital service plans and that the Board of Trustees create a special committee to confer with committees of Hospital Associations and other similar agencies for this purpose.

OHIOANS COP GOLF PRIZES

A number of Ohio physicians were among the winners and runners-up in the tournament of the American Medical Golfing Association, in which a record field of 243 contestants participated. The matches were held at the Cleveland Country Club and the Pepper Pike Club on Monday, June 2.

Dr. J. J. Marek, of Cleveland, was runner-up champion with a gross score of 152 for 36 holes, thereby winning the famous St. Louis trophy. He lost by three strokes to Dr. George R. Love, of Oconomowoc, Wis., who turned in three under par for the last nine holes. Dr. J. J. Harrison, of Napoleon, won the President's Trophy for the best net in the championship flight, and in the 18-hole championship contest Dr. L. J. Carson, of Cleveland, was runner-up. In the 18-hole handicap championship second place was won by Dr. H. D. Chamberlain, of McArthur, who was awarded the Atlantic City trophy. Dr. L. F. Huffman, of Cleveland, was winner of the Urological prize in the Section event.

Also winners in the first, second, and third flights were: Dr. S. E. Gates, of Conneaut; Dr. H. W. Salter, of Cleveland; Dr. W. R. Riddel, of Jackson; Dr. J. B. Sampsell, of Van Wert; Dr. Valloyd Adair, of Lorain; Dr. G. A. Hoke, of Elyria; Dr. H. C. Marsico, of Lorain; and Dr. A. J. Kirchner, of Lorain.

New president of the A.M.G.A. is Dr. Harry E. Mock, of Chicago. Dr. John B. Morgan, of Cleveland, was elected first vice president; Dr. H. V. Hubbard, of Plainfield, N. J., was named second vice president; and Bill Burns, of Lansing, Mich., was appointed executive secretary.

OHIO PHYSICIANS REGISTERED

Ohio physicians who registered at the Cleveland sessions were:

Akron—Paul R. Adams, C. R. Anderson, Harry Anker, P. Z. Arapakis, D. S. Arbuckle, Margaret R. Baker, John Bakos, H. R. Baremore, Jr., Roy Barnwell, Robert M. Bartlett, C. L. Baskin, Millard C. Beyer, T. L. Bliss, Frank H. Bly, J. H. Bond, Merle F. Bossart, John J. Bowlen, John L. Brickwede, L. Emmitt Brown, Jr., E. W. Burgner, Lloyd Catron, Sidney B. Conger, Harold R. Conn, Floyd H. Cook, Derwin D. Daniels, Laura Dasef, Adrian E. Davis, Daniel W. Davis, Paul A. Davis, Roger Q. Davis, P. C. Doran, A. F. Dorner, Frank V. Dunderman.

LeRoy C. Eberhard, John T. Evans, Geo. A. Ferguson, E. B. Foltz, R. S. Friedley, Nathan P. Frolkis, Stephen V. Geroch, Myer J. Gibans, H. H. Gibson, Harold J. Gordon, R. A. Gregg, E. W. Grubb, Harley A. Haynes, Jr., Chas. E. Held, Glenn H. Heller, J. F. Henderson, W. Stuart Henderson, Carrie A. Herring, T. Herwig, B. H. Hildreth, C. T. Hill, Warren L. Hogue, Walter A. Hoyt, Clarence L. Hyde, J. Walter Johnson, Roy F. Jolley, Harvey A. Karam, Walter A. Keitzer, Harold H. Klingler, Erwin J. Kraker, James G. Kramer, Carl E. Krill, Theodore A. Krutky.

James G. Lemmon, R. M. Lemmon, Donald B. Lowe, G. A. Lucas, Wm. D. Lyon, Daniel F. Mathias, J. C. McClelland, Cletus T. McCormish, D. M. McDonald, Jos. L. McEvitt, Samuel E. McMaster, Samuel J. Michaels, Myrl M. Miller, Noah Miller, Samuel Miller, John E. Monning, Frank T. Moore, M. C. Morgan, S. Morgenroth, Harvey H. Musser, Ellis L. Noble, Carl C. Nohe, A. P. Ormond, Geo. A. Palmer, Philip J. Panitz, G. K. Parke, Wm. A. Parks, Thayer L. Parry, Roy G.

Pearce, Chas. C. Pinkerton, R. E. Pinkerton, Dallas Pond, J. W. Pond.

Fred M. Rankin, Fred K. Read, W. R. Rechsteiner, Howard Wm. Reed, John Repasky, Fowler B. Roberts, A. S. Robinson, Ronald L. Ross, J. Paul Sauvageot, Milton R. Schwartz, T. P. Scuderi, H. Vern Sharp, Louis Sheinin, Hazel P. Simms, Jay D. Smith, J. E. Springer, F. W. Steiner, Carl R. Steinke, R. F. Thaw, Llewelyn I. Thomas, Donald M. Traul, Nicholas M. Tsaloff, J. M. Ulrich, James T. Villani, Edward L. Voke, Karl D. Way, Elizabeth M. Weaver, Edmund A. Weeks, Marshall R. Werner, Alven M. Weil, Rex H. Wilson, Louis A. Witzeman.

Canton—Edward Arnold, J. E. Aten, H. S. Batsch, H. H. Bowman, Harold J. Bowman, J. R. Brandon, Clement N. Clark, O. R. Clovis, Edward M. Feiman, S. J. Feingold, Wm. R. Ferraro, I. H. Fuhs, Harry W. Gauchat, John L. Gillen, Emerson Gillespie, Macy Ginsburg, Grover C. Goudy, Geo. S. Hackett, Ian B. Hamilton, J. Mace Harkey, Ronald M. Harner, Frank E. Hart, Anna R. Hendrickson, Mark G. Herbst, Fred R. Hise, Wm. H. Jacobson, Clair B. King, Franklin M. Krichbaum.

Chas. A. LaMont, Angelo Lapi, Loyal E. Leavenworth, Jos. J. Levin, A. A. Lichblau; Jos. A. Mack, W. A. McConkey, Jos. E. McNalley, James A. McNalley, E. O. Morrow, E. B. Mozes, Chester M. Peters, E. B. Pierce, J. Edwin Purdy, R. K. Ramsayer, M. H. Reno, Raymond S. Rosedale, Clarence J. Schirack, H. J. Schwensen, John M. Scott, Wm. Wylie Scott, John E. Shorb, Fred H. Stires, L. D. Stoner, Jos. F. Toot, David J. Tschetter, Frank S. Van Dyke, John M. Van Dyke, A. W. Warren, Homer V. Weaver, Howard B. Weaver, Louis L. Weiss, Pauline Zinninger.

Cincinnati—Nathan R. Abrams, W. A. Altemeier, Wm. Francis Ashe, James H. Bennett, Oscar Berghausen, Samuel L. Betagole, M. A. Blankenhorn, Byron E. Boyer, Albert L. Brown, Wm. Brueggemann, Leslie M. Buckner, R. J. Buckman, Melville E. CaJacob, A. Gerson Carmel, Ralph G. Carothers, Sander Cohen, Halford F. Conwell, S. Bertha Dauch, Daniel J. Davies, C. R. Deeds, Edward C. Elsey, Jos. P. Evans, Howard D. Fabing, Carroll J. Fairo, John H. Falk, Henry Felson, Earl V. Ferguson, Archie Fine, Jos. A. Freiberg, Leo S. Friedman, Joseph N. Ganim, Lawrence C. Goldberg, Samuel Goldblatt, Douglas Goldman, Sander Goodman, Henry M. Goodyear, J. Victor Greenebaum.

Albert L. Haas, Morton Hamburger, Geo. B. Heidelman, Jos. D. Heiman, Chas. D. Heisel, Louis G. Herrmann, D. W. Heusinkveld, Robert F. Hiestand, Chas. E. Howard, Paul I. Hoxworth, Benjamin Hoyer, Morris Hyman, Arnold Iglauer, Samuel Iglauer, D. E. Jackson, D. A. Johnston, Lloyd B. Johnston, Robt. Lee Johnston, Chas. C. Jones, Daniel V. Jones, Stewart R. Jones, Robert A. Kehoe, Chas. E. Kiely, Ray L. Kile, Daniel J. Kindel, Edward King, Karl V. Kitzmiller.

Max C. Labermeier, H. Jerry Lavender, Harry O. Lepsky, David L. Lerner, Jos. C. Lindner, W. H. Lippert, Alfred Lustberg, Donald J. Lyle, Willard F. Machle, Esther C. Marting, J. E. McCarthy, C. J. McDevitt, Clarence A. Mills, J. S. Mills, I. Arthur Mirsky, Harold K. Moss, A. W. Nelson, Harry G. Nelson, Louis B. Owens, Evalyn M. Partymiller, C. T. Perin, Philip E. Piker, Samuel H. Portnoy, R. E. Raitz, Helena T. Ratterman, Leon J. Renneker, Andrew C. Renz, Geo. E. Rockwell, R. C. Rothenberg, James M. Ruegsegger.

Moses Salzer, Leon Schiff, Harold S. Schiro, L. Howard Schriver, Irving H. Schroth, A. L. Schwartz, Bernard A. Schwartz, Theodore K. Selkirk, Chas. M. Siegel, B. C. Simmons, Parke G. Smith, Louis Sommer, Dora F. Sonnenday, H. L. Stitt, K. L. Stoll, Clifford J. Straehley, Cecil Striker, E. O. Swartz, Emil R. Swepston, Esther Bogen Tietz, Derrick T. Vail, Jr., Theodore H. Vinke, F. Wm. Vockell, Edward A. Wagner, Millard Wallenstein, Calvin F. Warner, Philip Wasserman, T. Brent Wayman, Charlotte Wiedemer, Abbott Y. Wilcox, Jr., A. M. Wigser, Carl A. Wilzbach, Paul M. Woodward, Jerome Zeigler, Mendel Zeligs, Meyer A. Zeligs, Albert R. Zoss.

Cleveland—W. J. Abbott, Thomas Adams, Fred Adelstein, Emil H. Adler, Lorne H. Aikins, R. P. Albaugh, Paul G. Albrecht, John A. Alexander, John Alison, Jr., Donald G. Allen, Maurice L. Allen, W. E. Allyn, John B. Anderson, John P. Anderson, F. W. Andreas, J. Robert Andrews, Albert R. Andrisek, R. F. Antoncic, Jack M. Appel, Herman S. Applebaum, Eugene J. Arday, Abraham Arons, L. M. Atlas, Ward M. Athey, Myron August, Jacob B. Austin, James J. Badal, Elmore R. Bailey, Augustus J. Baker, Temple A. Baldi, Robert E. Ballard, Robert E. Barney, William Barney, G. I. Bauman, S. Baumoel, A. J. Beamis, Claude S. Beck, Samuel Beckerman, N. S. Banker, C. Glenn Barber, Garry G. Bassett, Luther O. Baumgardner, D. A. Baumgartner, Francis Bayliss, Edward E. Beard, George H. Belhobek, James R. Bell, Richard P. Bell, D. G. Benjamin.

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Edward M. Kline, Benjamin S. Kline, Jay C. Kloepfer, P. J. Kmieck, Harold J. Knapp, Richard S. Knowlton, Peter N. Knusli, Lewis V. Kogut, Helen M. Koke, Eugene F. Kornreich, Lester W. Krauss, Henry E. Kretchmer, Abraham Krivonos, N. R. Krupkin, C. H. Kuhlman, Amy L. Kuhn, Harry J. Kumin, J. J. Kurlander, Charlotte E. Kusta, William Kutler, Louis W. Ladd, Jr., Francis M. Lait, Edward W. Lakner, Andrew J. Lamb, Wm. B. Landesman, A. H. Lanzer, Charles G. LaRocco, Bernard B. Larsen, G. Richard Laube, Victor C. Laughlin, Carl F. Lauster, M. B. Laven, Norman Lavine, M. Murray Lawton, J. Henry Lazzari.

Roscoe O. Leas, James T. Ledman, T. M. Lees, F. A. LeFevre, Walter I. LeFevre, Harry J. Lefkowitz, Carl H. Lenhart, Hugh J. Leslie, Max Levy, B. Levenberg, Benjamin Levine, Hyman P. Levin, Leo M. Levin, Geo. H. Lewis, Henry A. Lichtig, H. S. Lieberman, Louis Lieberman, S. C. Lind, John E. Linden, P. R. Lindsey, F. W. Linn, Harry A. Lipson, Robert Lockhart, McKinley London, William E. Lower, Roswell Lowry, David Lubin, H. Lupeson, Ivan G. Lust, James Lynch, W. W. Macey, A. Cameron MacNiel, Max Mahrer, Reuben R. Maier, Bernard S. Malasky, Martin M. Mandel, Joseph D. Mannino, David Marcus, Sarah Marcus.

J. J. Marek, Oscar B. Markey, Moses I. Marks, E. A. Marshall, John W. Martin, Maynard W. Martin, Alfred S. Maschke, John E. Maska, Harry W. Masenhimer, Ulysses G. Mason, E. A. Mastics, Val J. Mastny, Ignatius W. Matuska, Ralph S. Maurer, Raymond V. May, Robert J. May, Robert J. McCaffery, Julius W. McCall, John J. McCarthy, E. Perry McCullough, C. L. McDonald, Robert H. McDonald, John R. McDowell, F. Lambert McGannon, W. H. McGaw, C. Sherlock McGill, Russell S. McGinnis, Raymond C. McKay, Calvin P. McLaughlin, E. P. McNamee, Regis J. McNamee, Floyd S. Meck, Emerson Megrail, Jacob Meister, Harvey J. Mendelsohn, F. W. Merica, Roy B. Metz, Myron F. Metzenbaum, Edward J. Michalenko, Paul A. Mielcarek.

A. R. Miller, Geo. L. Miller, Harold N. Miller, Louis Miller, H. G. Miskjian, William E. Mishler, Sylvester C. Missal, Horace E. Mitchell, Edward P. Monaghan, S. H. Monson, M. P. Montlack, R. H. Mooney, C. L. Moore, Paul G. Moore, Paul M. Moore, Jr., William Moore, John B. Morgan, J. E. Morgan, Harry D. Morris, Cecelia K. Morris, Joseph L. Morton, Paul D. Mossman, M. Paul Motto, Floyd S. Mowry, C. E. Mulligan, Neil A. Munro, John A. Murphy, William G. Mussum, Victor C. Myers, Harry C. Nash, Edward P. Neary, Chas. F. Nelson, Andrew J. Nemecek, Earl W. Netherton, Aaron W. Newton, J. O. Newton, A. D. Nichol, Bernard H. Nichols, John H. Nichols, Benjamin Nozik, Chester P. Nuckoll, Emil C.

Oberson, Fred C. Oldenburg, Geo. P. O'Malley, Carl G. Opaskar, John D. Ormond, Conrad Ottelin.

Oscar Pan, Louis E. Papurt, Warren G. Parish, Robert F. Parker, Wendell Parker, Edward W. Parsons, Harry V. Paryzek, Julius W. Pastor, A. J. Pearse, V. F. Pekarek, Anthony J. Perko, Henry B. Perlman, Louis J. Perme, William H. Perry, R. P. Persky, Ben Peskind, Samuel Peskind, Edward Peterka, Ervin A. Peterson, George W. Petznick, Herschel H. Pevaroff, Albert M. Pfeffer, H. V. Phelan, Clovis H. Phillips, Josephine D. Phillips, Frances E. Pickett, H. D. Piercy, Joseph A. Pietrafese, Antonino Pirrone, Carlos E. Pitkin, Joseph C. Placak, John R. Plent, H. D. Pocock, David M. Polot, O. B. Pomeroy, L. A. Pomeroy, Max. M. Pomerantz, Joseph Portaro, U. V. Portmann, John K. Potter, Jay B. Price, Gordon H. Pumphrey, Samuel S. Quittner.

Cora J. Randall, Gerald L. Rankin, Albert T. Ransone, John E. Rauschkolb, W. A. Read, Robert A. Reading, N. L. Reagan, Elton W. Reckroft, Albert H. Reed, Faith W. Reed, Rudolph S. Reich, Herbert Reichle, R. R. Renner, R. John Renshaw, Samuel J. Restifo, W. J. Retzer, James L. Reycraft, Franklyn A. Rice, Edwin D. Richards, Margaret C. Richey, J. M. Rieger, Walter H. Rieger, Harry J. Riemer, William Rigelhaupt, Edward R. Rinaldi, Fred Rihinger, James R. Ripton, Samuel L. Robbins, John Robboy, Arthur E. Robertson, Ruth A. Robishaw, Richard B. Robrock, Harry L. Rockwood, H. Roenigk, Walter B. Rogers, E. F. Romig, Joseph C. Root, Chas. S. Rosen, Sanford E. Rosen, David V. Rosenberg, Wm. Rosenberg, Harry C. Rosenberger, Ralph S. Rosewater, Robert Rosner, J. McKinley Rossen, Arthur A. Roth, Carl Wm. Rotter, Vernon C. Rowland, Edward C. Roy, I. M. Rubin, D. L. Rubini, Albert D. Ruedemann, Peter E. Russo, George W. Ryall, Edward J. Ryan.

Louis Sacheroff, George L. Sackett, Jacob Saltzman, B. B. Sankey, A. G. Sar-Louis, Ernest D. Saunders, Henry F. Saunders, John P. Sawyer, A. L. Schaffer, John W. Schauer, Ralph A. Scherz, A. G. Schlink, Henry A. Schlink, F. J. Schmoldt, A. B. Schneider, H. Charles Schock, Irving L. Schonberg, Arthur H. Schumacher, Henry C. Schumacher, Henry M. Schur, Fred J. Schuster, Edward D. Schwartz, Rollin M. Schwartz, J. Schwartzberg, Haskell H. Schweid, A. Clayton Scott, Roy W. Scott, Hans Seidemann, Sarolta M. Selymes, William B. Seymour, Geo. D. Shaaber, William Shapero, Manuel A. Shapiro, Jay D. Sharp, Wilfrid D. Sharp, Paul Shaughnessy, A. Edward Shaw, H. A. Shecket William J. Sheehan, Edward L. Sherrer, North W. Shetter, Gerald Shibley, Marvin D. Shie, Howard H. Shiras, R. A. Shipley, T. P. Shupe, A. O. Sibila, Stanley S. Sidenberg.

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V. L. Tichy, John H. Tildes, John A. Toomey, Joseph Tomarkin, John A. Topinka, Alvyn W. Tramer, Bert A. Treister, Frank M. Trump, J. E. Tuckerman, W. H. Tuckerman, Geo. B. Tupper, Ralph K. Updegraff, Jr., Valentine Uyhely, Dale Van Duzen, C. E. Van Mason, H. S. Van Ordstrand, Frank Vecchio, Carroll H. Verovitz, John W. Viktoryn, John T. Vitkus, Eric Von Baeyer, Spencer A. Wahl, J. D. Walters, Claude D. Waltz, B. J. Walzak, C. E. Ward, James G. Warner, Robert A. Warren, William B. Wartman, Arthur L. Watkins, Ralph M. Watkins, Justin M. Waugh, Charles T. Way.

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Ray A. Bohl, Edgar C. Pickard, Stow; Clare W. Smith, Strasburg; Chas. Scofield, Struthers; C. P. Swett, Sugar Grove; H. W. Chaney, Sugar Tree Ridge; M. W. Livingston, Sunbury; Franklin M. Smith, Sycamore; W. L. Lathrop, Sylvania; Robert C. Chamberlain, William R. Funderburg, R. R. Hendershott, John M. Leahy, Paul J. Leahy, Edmund F. Ley, W. W. Lucas, R. F. Machamer, V. L. Magers, E. H. Porter, N. E. Williard, Tiffin; J. Knox Gibson, Tiltonsville; Fred B. Hapke, Berton M. Hogle, Kenneth F. Lowry, Troy; Robt. B. Chamberlin, Twinsburg; Jay W. Calhoon, Benjamin Pilloff, Uhrichsville; J. Craig Bowman, Upper Sandusky.

D. C. Houser, Urbana; R. A. Styblo, Valley City; E. Wallace Smith, Vandalia; G. A. Edwards, S. A. Edwards, Oscar J. Fatum, Roland H. Good, James R. Jarvis, J. B. Sampsell, H. D. Underwood, Van Wert; John R. Dickason, Emil J. Heinig, Vermilion; J. K. Durling, N. J. M. Klotz, H. T. Pease, Max Sternlieb, Louis S. Zwick, Wadsworth; Clyde Bahler, Walnut Creek; Charles C. Berlin, Roy C. Hunter, Wapakoneta; Charles A. Bogue, J. H. Caldwell, Everett M. Chalker, A. F. Compton, Morton Jay Crow, Royal B. Dobbins, W. G. Drown, J. A. C. Frell, Patrick J. Fusco, Paul C. Gauchat, J. A. Heeley, R. D. Herlinger, F. T. Kandrac, John D. Knox, R. H. McCaughtry, Henry J. Meister, Paul N. Mutschmann, Joseph A. Ralston, John F. Rudolph, A. H. Seiple, S. J. Shapiro, George W. Stimson, James J. Tyler, Warren.

J. H. Persinger, James E. Thompson, Washington C. H.; A. J. Payne, Waterloo; T. W. Watson, Wayne; C. J. Maxwell, Wellsville; Harvey J. Staton, West Carrollton; Dale E. Putnam, Westerville; H. D. Wright, West Jefferson; Geo. J. Roberts, Westminster; S. J. Ellison, Hazel Sproull, West Union; Theodore V. Gerlinger, J. C. Steiner, Willard; Alfred C. Mahan, J. G. McCracken, L. Warren Payne, Willoughby; Robert Conard, Wm. Kelley Hale, C. E. Kinzel, Wilmington; Lloyd E. Drossel, Chester G. Egger, Woodville; Lyman A. Adair, Harold G. Beeson, John B. Beeson, Eva Cutright, Edward W. Douglas, Jean S. Douglas, Edward C. Heyde, Philip C. McDowell, Wm. A. Morton, R. C. Paul, Loren G. Strauss, Robert N. Wright, Lincoln A. Yocum, Wooster; G. H. Bonnell, Worthington; Rogert C. Henderson, Nancy E. Lantzenheiser, Ben R. McClellan, H. C. Messenger, G. E. Savage, Xenia; L. W. Sontag, P. B. Wingfield, Yellow Springs; Edmund R. Brush, Samuel P. Carter, Ward D. Coffman, O. I. Dusthimer, Beatrice T. Hagen, Lester Lasky, M. A. Loebell, Robert S. Martin, Margaret O'Neal, Flora M. Pedicord, Clarence F. Sisk, Earl B. Zurbrugg, Zanesville.

First Annual Meeting of Woman's Auxiliary Held on June 2 in Cleveland; Officers and Directors for 1941-42 Elected

THE Women's Auxiliary to the Ohio State Medical Association has 1,679 members in 27 auxiliaries to county medical societies, and ranks fifth in membership in the 39 states which have auxiliaries, Mrs. J. E. Purdy, Canton, the President, reported at the First Annual Meeting of the State Auxiliary held at the Hotel Carter, Cleveland, Monday morning, June 2. Counties now organized are: Allen, Ashland, Belmont, Butler, Crawford, Columbiana, Cuyahoga, Defiance, Franklin, Hamilton, Highland, Huron, Knox, Lorain, Lucas, Mahoning, Medina, Miami, Richland, Scioto, Seneca, Stark, Summit, Tuscarawas, Trumbull, Van Wert and Washington.

Business transacted at the first session of the House of Delegates included the presentation and approval of reports of officers and various committees, and approval of amendments to the constitution and by-laws as published on page 276 of the March, 1941, issue of *The Ohio State Medical Journal.*

Officers and members of the Board of Directors of the State Auxiliary for 1941-1942 are:

OFFICERS FOR 1941-42

President—Mrs. W. W. H. Curtiss, Dennison.

President-Elect — Mrs. Fred C. Oldenburg, Cleveland.

Vice-President — Mrs. H. M. Clodfelter, Columbus.

Secretary-Treasurer—Mrs. J. L. Stevens, Mansfield.

BOARD OF DIRECTORS

First District—Mrs. Wm. L. Freyhof, Cincinnati.

Second District—Mrs. H. W. Kendell, Covington.

Third District—Mrs. J. R. Jarvis, Van Wert.

Fourth District—Mrs. D. J. Slosser, Defiance.

Fifth District—Mrs. Clyde L. Cummer, Cleveland.

Sixth District—Mrs. R. B. Poling, Youngstown.

Seventh District—Mrs. C. W. Kirkland, Bellaire.

Eighth District—Mrs. R. M. Meredith, Marietta.

Ninth District—Mrs. A. P. Hunt, Portsmouth.

Tenth District—Mrs. J. W. Wilce, Columbus.

Eleventh District—Mrs. R. F. Fasoli, Brunswick.

The new officers were installed by Mrs. David W. Thomas, First Vice-President of the Woman's Auxiliary to the American Medical Association, who assisted in the organization of the State Auxiliary at Cincinnati last year.

Mrs. Purdy, the retiring President, presented the gavel to Mrs. Curtiss, the incoming President. Made of wood from the home of the late President William McKinley, the gavel was given to the Auxiliary by the Canton Chamber of Commerce. Mrs. Curtiss received it graciously and said she would try to live up to the high ideals which it represents, and that she would use as her motto in her new duties, "United we stand, divided we fall."

The session closed with a unanimous vote of thanks from the members of the House of Delegates to the officers and members of the Board of Directors for their efforts to organize the state and to carry on the work of the Auxiliary.

DELEGATES AND ALTERNATES

Delegates and alternates which had been elected by the various county auxiliaries follow:

First District—**Highland**—Mrs. W. B. Roads, Hillsboro, delegate; Mrs. Wm. M. Hoyt, Hillsboro, alternate. **Hamilton**—Mrs. Louis Feid and Mrs. David W. Heusinkveld, Cincinnati, delegates; Mrs. Ralph W. Eddy and Mrs. Roy L. Kile, Cincinnati, alternates.

Second District — **Miami** — Mrs. George A. Woodhouse, Pleasant Hill, delegate; Mrs. Wm. W. Trostel, Piqua, alternate.

Third District—**Allen**—Mrs. Walter A. Noble, Lima, delegate; Mrs. R. B. Krouse, Lima, alternate. **Crawford**—Mrs. E. C. Brandt, Crestline, delegate; Mrs. C. E. Lingenfelter, Bucyrus, alternate. **Seneca**—Mrs. Wade K. Chamberlin, Tiffin, delegate; Mrs. Wm. Gordon Hartnett, Fostoria, alternate. **Van Wert**—Mrs. O. J. Fatum, Ottoville, delegate; Mrs. H. D. Underwood, Van Wert, alternate.

Fourth District—**Defiance**—Mrs. D. J. Slosser, Defiance, delegate; Mrs. J. S. Hull, Hicksville, alternate. **Lucas**—Mrs. John T. Murphy and Mrs. Clarence Daniells, Toledo, delegates; Mrs. Clarence E. Hufford and Mrs. E. Benjamin Gillette, Toledo, alternates.

Fifth District — **Cuyahoga** — Mrs. Charles T. Way, Mrs. Paul M. Spurney, Mrs. H. V. Paryzek, Mrs. E. P. McNamee, Cleveland, delegates; Mrs. F. T. Gallagher, Mrs. A. C. Ernstene, Mrs. T. T. Zuck, Mrs. M. Paul Motto, Cleveland, alternates.

Sixth District—**Mahoning**—Mrs. Dean A. Nesbit, Mrs. R. M. Morrison, Youngstown, delegates; Mrs. Charles D. Hauser and Mrs. John J. McDonough, Youngstown, alternates. **Stark**—Mrs. Chester M. Peters, Canton, and Mrs. R. L. Rutledge, Alliance, delegates; Mrs. Loren L. Frick, North Canton, and Mrs. G. C. Goudy, Canton, alternates. **Trumbull**—Mrs. E. R. Westbrook, Newton Falls, delegate.

Seventh District—**Belmont**—Mrs. R. H. Wilson, Martins Ferry, delegate; Mrs. John O. Robben, Martins Ferry, alternate. **Tuscarawas** — Mrs. Margaret Coleman, New Philadelphia, delegate; Mrs. R. J. Foster, New Philadelphia, alternate.

Eighth District — **Washington** — Mrs. J. F. Weber, Marietta, delegate; Mrs. F. E. Eddy, Marietta, alternate.

Ninth District — **Scioto** — Mrs. Frank Seidenburg, Portsmouth, delegate; Mrs. Oscar R. Micklethwait, Portsmouth, alternate.

Tenth District—**Franklin**—Mrs. Ralph W. Hoffman and Mrs. George O. Hoskins, Columbus, delegates; Mrs. M. E. Millhon and Mrs. R. S. Fidler, Columbus, alternates. **Knox**—Mrs. Julius Shamansky, Mt. Vernon, delegate; Mrs. John C. Drake, Mt. Vernon, alternate.

Eleventh District—**Ashland**—Mrs. L. G. Sheets, Ashland, delegate; Mrs. George M. Emery, Ashland,alternate. **Huron**—Mrs. J. D. Bradish, New Lndon, delegate; Mrs. T. H. Smith, New London, alternate. **Lorain**—Mrs. M. E. Kishman, Lorain, delegate; Mrs. L. C. Meredith, Elyria, alternate. **Medina**—Mrs. N. J. M. Klotz, Wadsworth, delegate; Mrs. H. G. Lehrer, Wadsworth, alternate. **Richland**—Mrs. S. C. Schiller, Mansfield, delegate; Mrs. Charles L. Shafer, Mansfield, alternate.

DR. PARYZEK SPEAKS

Guests at a luncheon session of the House of Delegates, Monday noon, included Dr. Barney J. Hein, Toledo, a member of the Advisory Committee of the Ohio State Medical Association to the Auxiliary; Dr. Wm. M. Skipp, Youngstown, President of the Association, and Dr. Harry V. Paryzek, Cleveland, the President-Elect, who was the principal speaker. Dr. Paryzek's remarks follow:

"It is a distinct privilege and a pleasure to have this opportunity of discussing some of our problems with you particularly on the first anniversary of your organization.

"Before presenting the main topic of discussion, I wish to take this opportunity to congratulate the Auxiliary of the State and at the same time pay tribute to the splendid work done by your State Chairman, Mrs. Purdy. Her innate organizing ability and conscientious devotion to her duties has establisheld an excellent Auxiliary in Ohio. Her example will be an incentive to those who follow and I have reason to believe that the Ohio Auxiliary will be the largest and most influential in the entire organization.

MUST BE COOPERATION

"You are, no doubt, eagerly awaiting word from our State Council and Advisory Committee relative to some of the problems in which we have a common interest. It is important for all of you to understand and appreciate that as members of the Auxiliary to the organized medical profession, your sole purpose is to cooperate with the profession in solving some of its problems. Your activities, apart from those of a solely social character, should always be carried on in close cooperation with your local county society. The State Medical Association, through its House of Delegates and The Council, establish policies on public questions which are usually of statewide importance. Your local county society frequently has local problems which they analyze and discuss before attempting to apply a remedy. These various policies and procedure are then submitted to the individual members for proper action.

"The Auxiliary, with the fine spirit of cooperation it has shown in the past, I am sure, will continue to cooperate with the local and state societies in many of these activities and thereby present a solid front which will have a definite effect upon public opinion.

"In our present national emergency, problems will arise which will be inherently associated with the various local preparedness programs, notably the local civilian care and defense in case of war. Before long, we shall be expected to make adequate preparations to meet any emergency, particularly in the larger manufacturing centers which may become involved in case of a complete war. Your Auxiliary, cooperating with the local society, can, I am sure, set up any such arrangement and do it well.

LEGISLATIVE PROBLEMS

"Our recent experience with the introduction and passage of enabling legislation, which permits the formulation of voluntary prepayment medical care plans, may serve as an example of the value of a good Auxiliary. The various local auxiliaries in existence at the time entered into this activity in a wholehearted fashion. The result, as you know, was the passage of the bill by an overwhelming vote in the House and Senate. This year, our State Association will be very actively interested in the establishment of medical care plans in certain areas throughout the state.

"A brief outline of some of the fundamental principles which prompted the State Council to formulate the enabling act, I believe will interest you and give you a clearer conception of our motives.

"In view of the more or less apparent criticism and at times obvious persecution of the medical profession which has been going on for the past several years, it is obvious that we, as a profession, must have an answer. Our failure to present an answer to the problem of medical care to the low income groups, will, without doubt, facilitate the efforts of a paternalistic government to step in and and govern the practice of medicine.

"We believe that with the rapid advance in scitific medicine and the evident cost which such progress entails, there are proportionately few people who can afford all necessary and adequate medical care. There is a greater number of individuals in the low income levels who are frequently overburdened unnecessarily particularly when catastrophic illness enters the picture. Advising individuals in the low income groups to budget for their health is a sound principle which will assure them of satisfactory medical care.

MEDICAL SERVICE PLANS

"The enabling act is based on the principle that the individual has a perfect right to choose his own physician and needs no third party to help him in his choice. The physician in turn may or may not accept the responsibility of the patient's care and thereby mutually agree as to the future management of the individual illness. The plans for medical care advanced to date apply this principle. Furthermore, the law itself has set up definite safeguards which will protect the interests of the subscriber.

"We believe that the introduction of these plans in communities where there is an apparent need for such arrangements will in no way disturb the present American way of practicing medicine. The safeguards in the law will assure the subscriber of adequate medical care in the hands of cooperating physicians of his own choosing and by enrolling large groups of employed individuals as subscribers, the participating physician will be assured of his fee.

"The Auxiliary, which is composed of the wives, mothers and daughters of physicians, is seriously involved in this problem and I am confident will give it its full attention. We must, as a body, look upon this very vital problem without emotion and without prejudice. By seriously analyzing this problem with an open mind and a wholesome spirit, we shall be performing a real service for the cause of medicine. Selfishness must be set aside, since we as a profession and you as its Auxiliary, have dedicated ourselves in performing a genuine service to the public. Our actions and our policies should always be predicated upon the principle of promoting and maintaining the health of the public.

"Other problems requiring your help will come up from time to time and the Advisory Committee to your Auxiliary will be most willing to guide and advise you in your activities.

"In conclusion, allow me to congratulate you for the splendid work you are doing. I hope your membership will keep growing so that we may have one of the strongest Auxiliaries—an auxiliary which understands our problems and is willing to give us wholehearted cooperation. From the bottom of my heart, I wish you God speed and good luck."

Dr. James W. Rowe Honored

Dr. James W. Rowe, Cincinnati, who has practiced medicine for almost half a century and who will retire from active practice this year, was guest of honor at a recent testimonial dinner at the Hotel Alms, attended by more than 140 Cincinnati physicians. Dr. E. O. Swartz, past-president of the Cincinnati Academy of Medicine, was the toastmaster. Speaking briefly in praise of Dr. Rowe's service were: Rev. F. J. Moore, Dr. Millard Wallenstein, Dr. William P. Gillespie, Dr. J. Louis Ransohoff, Dr. William Mithoefer, Dr. Charles E. Howard and Councilman Russell Wilson. Following the presentation of a large seascape painting, Dr. Rowe expressed his appreciation.

Additional Ohio Physicians Called To Active Service With Armed Forces

Additional Ohio physicians were called into active military service during the past month and the previous orders of a number revoked. Assignments and revocations were as follows:

Ft. Thomas, Ky.: Lt. Burt N. Coers, Circleville; Capt. Frank E. Hamilton, Columbus.

Ft. Knox, Ky.: Lt. Osler A. Abbott, Cincinnati; Lt. Morris M. Kessler, Cleveland Heights; Lt. Howard V. Mishler, Cleveland; Lt. Joseph A. Votypka, Cleveland; Lt. Morris Weiss, Cleveland; Lt. Richard Waldo Eckstein, Cleveland; Lt. Richard Thos. Sauer, Dayton.

Ft. Hayes, Ohio: Lt. Harold Frederick Wherley, Coshocton; Capt. Theodore C. Allenbach, Columbus.

Randolph Field, Texas: Lt. Edward Robert Hill, Cleveland.

Air Base, Charlotte, N. C.: Lt. Robert R. Bartunek, Shaker Heights; Lt. John S. Downing, Akron; Lt. Philip J. Robochek, Cleveland; Lt. Edward R. Schumacher, Columbus.

Air Base, New Orleans, La.: Lt. Wm. R. Calland, Barberton; Lt. Chas. Jos. Deishley, Columbus; Lt. Martin M. Horowitz, Columbus; Lt. Carl Wm. Roth, Columbus.

Drew Field, Fla.: Lt. Jack A. Adelman, Columbus.

Kelly Field, Texas: Lt. Jack Schluger, Dayton; Lt. Jos. Chas. Forrester, Columbus.

Brookley Field, Mobile, Ala.: Lt. Carroll A. Peabody, Shaker Heights.

Lawson Field, Ft. Benning, Ga.: Lt. Steven R. DeMeter, Cleveland.

Ellington Field, Houston, Texas: Lt. Merl B. Smith, Toledo; Lt. Harry Bremen, Dayton.

Advanced Flying School, Phoenix, Ariz.: Lt. Donald Duncan Meyer, Columbus.

Lowry Field, Colo.: Lt. Woodrow Sidney Hazel, Youngstown.

Orders Revoked: Lt. Thomas Knowlton Preston, Springfield, previously ordered to Ft. Knox, Kentucky; Lt. Milton Ross Ort, Columbus, previously ordered to Ft. Thomas, Kentucky; Lt. Earl C. Van Horn, Springfield, previously ordered to Ft. Knox, Kentucky; Lt. Geo. Haskel Curtis, Cleveland, previously ordered to Ft. Thomas, Kentucky; Lt. Lewis O. Frederick, Jr., Osborn, previously ordered to Ft. Knox, Kentucky; Lt. William L. Wead, Sabina, previously ordered to Ft. Hayes, Ohio; Lt. Joseph M. Kaplan, Cleveland, previously ordered to Ft. Knox, Kentucky; Lt. Mervin Franklin Steves, Cincinnati, previously ordered to Ft. Thomas, Kentucky; Lt. Leo L. Diamond, Cincinnati, previously ordered to Ft. Knox, Kentucky; Lt. Regis F. Golubski, Cleveland, previously ordered to Ft. Knox, Kentucky.

Vote of Cleveland Academy Not Considered Rejection of Medical Care Plan Principle; Events and Developments Leading Up to Recent Action Are Reviewed

IN view of the many conflicting statements which have appeared in the newspapers throughout the state relative to the recent vote on a medical care plan by the membership of the Academy of Medicine of Cleveland, *The Journal* believes it advisable to present a factual and chronological review of events and procedures leading up to the vote by the membership of the Cleveland Academy, in order to set forth a rational and complete picture of the situation for members of the Ohio State Medical Association.

In February, 1939, the Board of Directors of the Cleveland Academy submitted to the membership an outline of a medical care plan which entailed partial coverage limited to subscribers to the Cleveland Group Hospitalization Plan, and which service was applicable only during hospitalization and was based on a per diem basis with services limited to 21 days.

VOTE IN 1939

That vote was by postal card ballot on which the following questions were asked: (a) Do you favor further consideration by the Academy of the accompanying plan? (b) Do you favor consideration by the Academy of some other plan for prepayment of medical services?

The result of the vote taken in the Spring of 1939 was as follows: Number of ballots mailed, 1,122; valid ballots received, 659; percentage of members voting, 57%; favoring further consideration of Academy plan, 256; favoring consideration of some other plan, 244; favoring consideration of Academy plan and some other plan, 55; vote against further consideration of any plan, 104.

On the basis of the above returns it was evident that more than five to one of the membership favored some sort of plan.

Following this vote the Board of Directors constituted themselves as a committee-of-the-whole to study and work out another plan for presentation to the membership. The Board authorized the appointment of a steering committee of three which acted in an advisory capacity to the Board regarding methods of procedure.

COMMITTEE GOES TO WORK

After studying the various types of medical care plans, the steering committee recommended to the Board of Directors that a prepayment medical care plan be developed in preference to a cash indemnity plan which was deemed inadvisable and impractical.

Up to this time there was no enabling legislation in Ohio which would permit the establishment of any type of medical care plan. The Council of the Ohio State Medical Association, realizing the need for this type of legislation, authorized a committee to proceed in the preparation of such legislation. The Enabling Act was introduced in February, 1941; was passed by both Houses of the Legislature, and signed by the Governor. The Act will become effective Aug. 5.

During the development of the Enabling Act last Fall and its passage in the General Assembly this Spring, the Economics Committee of the Academy of Medicine of Cleveland developed a proposed plan which conformed in every respect with the Enabling Act and the 10 principles of the A.M.A., and presented to the Board of Directors for discussion and adoption.

RESOLUTION ADOPTED

The Board of Directors of the Academy on April 8, 1941, adopted the following resolution:

> "WHEREAS, The Board of Directors of the Academy of Medicine of Cleveland and Cuyahoga County Medical Society believes that the best interest of the medical profession and the public requires the organization of plans to help the middle income groups budget for medical care, and
>
> "WHEREAS, It believes such plans should be offered, directed and controlled by the medical profession,
>
> "BE IT RESOLVED, That the Board of Directors approves the Medical Care Plan as recommended by the Economics Committee and adopts it subject to the approval of the membership of the Academy, and further
>
> "BE IT RESOLVED, That approval by the membership of this action of the Board of Directors shall be interpreted by the Board of Directors as authority to proceed with establishment of the plan."

The Economics Committee of the Cleveland Academy, on behalf of the Board of Directors, in presenting the proposed medical care plan to the voting membership at a stated meeting of the Academy on May 26, 1941, specifically emphasized that at this initial stage complete details of any plan could not be set forth. The fee schedule, legal terminology, promotion, partial coverage, etc., were all details which warranted further study, it was pointed out. However, both the Committee and the Board of Directors felt that at this particular time some expression of the membership should be forthcoming before the final draft was prepared and presented to the members.

RECENT VOTE

Early in June, 1941, a ballot was submitted to the membership, containing the aforementioned resolution, and the members were asked to vote on the following:

"I approve the resolution of the Board of Directors on Medical Care Plans, and authorize the Board to proceed thereunder." ____________

"I disapprove the resolution of the Board of Directors on Medical Care Plans." ____________

The result of the balloting was as follows: Number of ballots mailed, 1,203; valid ballots received, 855; percentage of members voting, 71%; members approving the resolution, 396; members disapproving the resolution, 459.

"NOT COMPLETE REJECTION"

It is obvious as a result of the balloting, and judging from numerous comments made by members of the Cleveland Academy, that there appears to be considerable difference of opinion about the tentative proposed plan on which members of the Cleveland Academy had been requested to express themselves. However, in the opinion of many who had taken an active part in the developments leading up to the recent vote by the Academy and in the opinion of many other members of the Academy, the vote should not be considered as a complete rejection of the medical care plan idea and principle. In the belief of such members of the Cleveland Academy, with some changes in the proposed plan, especially changes with respect to partial coverage for catastrophic illness, a satisfactory plan will be formulated and eventually adopted by the membership.

Dr. Wiggers Given Honorary Degree

Dr. Carl J. Wiggers, professor of physiology, School of Medicine, Western Reserve University, was awarded the honorary degree of Doctor of Science by the University of Michigan at its commencement exercises, June 21.

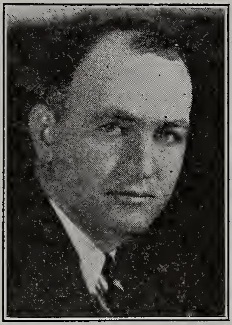
An authority on the physiology of the heart and circulation, in recent years Dr. Wiggers has concentrated upon phases of research in this subject, including ventricular fibrillation, in angina pectoris and coronary occlusion and in accidental electrocution; and has also conducted studies of extra-cardiac factors of circulation, the part the blood vessels play in the blood flow particularly in failure of the circulation in surgical shock and similar conditions.

Dedicate Tablet to Dr. Austin

Tribute was paid to the late Dr. George M. Austin, prominent Wilmington physician and geologist, at the dedication of a bronze tablet to his memory on the lawn of the Wilmington Public Library, Sunday, June 15. Dr. Robert Conard, Wilmington, was one of the speakers. Several years before his death in 1930, Dr. Austin presented his fossil collection of 25,000 specimens to the National Museum, Washington, D. C., where it is now available for study.

Dr. Kemp Named Dean of Ohio State University College of Medicine

Dr. Hardy Alfred Kemp has been named new dean of the College of Medicine of the Ohio State University to succeed Dr. J. H. J. Upham, who will retire this summer because of reaching the compulsory retirement age for faculty members. At present Dr. Kemp is dean of the College of Medicine at the University of Vermont.


Dr. Kemp

The appointment was approved by the Board of Trustees and a committee of the medical college faculty upon recommendation of the university president. It is to become effective between July 1 and September 1 at the convenience of Dr. Kemp. Not yet 39 years of age, Dr. Kemp is one of the youngest deans of American medical schools. His new position at Ohio State carries with it also the directorship of Starling Loving (University) Hospital.

The new dean is a native of Monett, Mo. He received the degree of Bachelor of Science in Medicine at St. Louis University in 1923 and became a Doctor of Medicine at the same school in 1926. He is widely known for his work on endemic typhus and relapsing fever, and his research in the latter field earned him the 1934 award of the Texas Pathological Society and the Southern Medical Association for scientific work.

After graduating from St. Louis University he held a teaching fellowship in bacteriology there, and in 1928 he became associate professor of bacteriology and hygiene at Baylor University. In 1937 he was promoted to full professorship.

During summers from 1935 through 1938 Dr. Kemp was visiting professor of bacteriology, teaching courses in immunology, at the University of Texas Graduate School. He became Vermont's dean in 1939.

Dr. Kemp is a major in the medical reserve corps of the U. S. Army. He has written a number of papers on subjects in his special field and he holds membership in several scientific societies, including the Royal Society of Tropical Medicine and Hygiene, the American Association for Advancement of Science, the American Association of Pathologists and Bacteriologists, the Society for Experimental Biology and Medicine, and the American Society of Tropical Medicine. He is a Fellow of the American Medical Association and a member of the State Medical Association of Texas.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

“The Dean” Retires, But His Leadership Will Be Long Remembered

Retirement of Dr. J. H. J. Upham as dean of the College of Medicine, Ohio State University, presents an opportunity for reflection as to just how much his extremely active carrer has meant to the medical profession of Ohio and the Ohio State Medical Association.

We do not intend to sing a swan song for Dr. Upham. For one with his vigor and enthusiasm and for one who stays so refreshingly young, to do so would be decidedly premature. His interest in the affairs of the medical profession is something which will never be laid on the shelf.

What we do want to do is to simply cite Dr. Upham as an example of an organization leader par excellence. In his 40 years of active participation in the work of local, state and national medical societies he has never been too busy, so far as we are able to recall, to attend a conference, address a medical society, appear before a committee in the Legislature, discuss policies and procedures in private, pinch-hit in emergencies, etc. On many occasions while acting as a liaison between the profession and lay groups, he has played a big part in ironing out difficulties and bringing about understandings. He has been the originator of many of the activities which have been successfully carried on, with his help, by the State Association and he always comes forth with a tangible idea when his advice and counsel are sought. The medical profession of Ohio owes him much by way of appreciation for what he has done for medicine and medical organization and what he has stood for over a period of years. The younger and middle-aged men in the profession are enjoying greater opportunities and are better protected in many respects because of the labors of Dr. Upham and others like him. The least they can do to express their gratitude is to put on the harness which he and others like him have worn for so long and carry on the work which they have been doing on behalf of the entire medical profession with the same spirit of loyalty and devotion. Medical organization always will need leaders like Dr. Upham—in fact such leadership is indispensable.

I find the great thing in this world is not so much where we stand so much as in what direction we are moving.—Oliver Wendell Holmes.

Review of Some New Laws To Be Published in August Issue

In its August issue, *The Journal* will present reviews and interpretations of some of the more important medical and health laws enacted by the Ninety-Fourth Ohio General Assembly at its recent regular session.

By the time the August issue goes on the press, printed copies of the enrolled bills will be available and it will be possible to analyze each so that an accurate digest of its content and meaning can be prepared.

Some of the new laws will directly affect physicians; some indirectly. An effort will be made to present the pertinent sections of the important ones so physicians will be prepared to carry on in accordance with the new or revised statutes.

Watch for this “Legislative Review” being prepared for the August issue and plan to file that issue for ready reference.

Ohio’s Selective Service System is ranked as one of the finest in the nation because of the efficient work performed by the local Selective Service personnel, including the examining physicians.

Ye Editor has been kind enough to lend this space to the Ex. Sec. for a few personal comments and observations of not too great importance.

It’s Not the Humidity, Doctor, Just the Sulfanilamide!

There is an old newspaper proverb which says in effect if a dog bites a man, it’s not news—skip it; but should a man bite a dog, get the story—that’s news.

By the same token, when the Ex. Sec. attends an Annual Meeting of the State Association, it’s nothing unusual—skip it; but when the Ex. Sec. fails to get to an Annual Meeting, some logical reason ought to be presented.

For the first time in 13 years, the Ex. Sec. this year had to forego the pleasure of an Annual Meeting of the State Association. Some kind of a bug got him a week before the recent meetings of the State Association and the A.M.A. in Cleveland and try as he did, he couldn’t shake the pesky critter in time to take in the Cleveland festivities.

The family doctor called it a “low grade” something-or-other. Maybe so, but in the opinion of the Ex. Sec. it was simply an attack of that good old occupational disease, "legislative poisoning". Whether it was "low grade" or "high grade" depends pretty much on one's point of view on legislative and political matters generally.

Despite his keen disappointment at not being able to attend Ohio's biggest medical assembly and the State Association's business sessions, the Ex. Sec. learned a few things of compensating value during his enforced layoff.

For example, there was re-emphasis of a fact with which he was entirely familiar, namely: The State Headquarters Office is blessed with a staff of efficient and loyal individuals who are capable of meeting unexpected events without a ripple of confusion or disorganization. Reports on the meeting indicate that Assistant Ex. Sec. Saville and the others did such a good job on arrangements and details that it might be in the interest of efficiency for the Ex. Sec. to arrange for an annual illness along about Annual Meeting time—darn it. Well, be that as it may, that is the way things ought to be in a well-organized office. The State Association has been wise in wanting an efficient staff at its central office—in lieu of a one-man show. Happenings like this are good for a guy occasionally—they make him realize that after all the word "I" is rather insignificant and of relative unimportance.

On the other hand, there was that compensating factor represented by the numerous expressions of sympathy and best wishes received by the Ex. Sec. from members hither and yon. The telegrams from The Council and House of Delegates, the letters and cards from physician-friends, as well as from fellow Ex. Sec's. from the other states, did a lot to compensate for the old boy's aches and pains. Truly, it was swell to know that so many were really interested in the patient's condition and that the officials were fairly well satisfied with the present state of affairs within the Association.

While hugging hot water bottles, sucking on thermometers, and chewing pink and white pills, the Ex. Sec. had a lot of time to think about the past 13 years—since Nov. 1928, when he became affiliated with the headquarters staff of the State Association. A lot of water has gone over the dam and with it a lot of real pleasure, fun and headaches. There have been some tough problems—some solved; some unsolved. Many new activities and programs have been initiated—most of them successful; a few of them flops. In general the record stacks up pretty well—thanks to the loyalty and energy put forth by so many volunteer workers within the membership. The oftener he reviews the events of bygone years the more the Ex. Sec. is impressed by the real greatness of the medical profession as a group and that inherent something in most physicians as individuals which makes them gentlemen, scholars, humanitarians and good fellows all under the same label. Yes, they're swell fellows to work for. With such a foundation, the State Association always ought to be a potent agency.

In conclusion, the Ex. Sec. feels obligated to strike a scientific note. It's about this stuff they call sulfanilamide. Yep, it does the business—we'll testify to that—but we'll also bear witness that it sure raises hell with the tummy. No wonder the bugs curl up and die. We recommend, my dear Doctor, that you try some yourself sometime just for the heck of it—or if you prefer a substitute, try a straight shot of sulphur with some tincture of brass as a chaser. It makes a great summer drink.—C.S.N.

Judging from recent news dispatches from Washington, wise will be the physician who starts economizing right now so he will have something laid aside to meet inevitable higher taxes next year.

Nutritional Program of Great Significance to the Medical Profession

It is hoped that every Ohio physician will read carefully the article written by The Editor of *The Journal* regarding the recent Washington Conference on Nutrition, appearing elsewhere in this issue, not because it carries the by-line of The Editor but because of the significance of the conference which he had the privilege of attending.

The White House conference on nutrition is too important to the physicians of Ohio to be dismissed lightly. It was composed of fine specimens of the best in American leadership in medicine, dentistry, nursing, public health, farming, labor, and the food industry itself.

As a result of its deliberations, this conference called upon every practitioner of medicine to bring itself up to date on this subject and not only to be prepared to advise his own patients and their families, but to actively cooperate as individuals and as members of medical societies with public health groups and other agencies in teaching the public what it should know if we are to become a nation whose citizens are possessed of robust, buoyant health. Germany through the methods of a dictator with very simple foodstuffs has performed wonders with its people and has developed the finest of physical specimens in its army from those "turnip waifs" of Herbert Hoover. We must produce the same result in the democratic way through education if we are to survive as a nation.

The conference brought out clearly to all who followed its deliberations that health is largely a matter of nutrition and nutrition is certainly a matter of foodstuffs. So, health rests upon this very broad base of agriculture, labor, the food industry and the wisdom of the home-maker. Many groups have, therefore, a part of the responsibility but no one group more than physicians. The challenge has been given to the medical profession. Physicians must provide themselves with literature on the newer developments in nutrition, arrange for programs on nutrition in medical societies, and take advantage of postgraduate courses in nutrition as they become available. The profession must not be caught napping. Now is the time for the doctor to begin educating himself in this vital field of national defense and preservation.

The machine tool industry has nothing on us; we need mechanics too—men who will work to shape the world that is to be.—Columbus Academy of Medicine Bulletin.

Death Claims Efficient Secretary of Wisconsin Society

Those who have been active in medical organization activities over a period of years, especially in touch with the programs of various state medical societies, were shocked to learn of the sudden death of George Crownhart, aged 45, executive secretary of the Wisconsin State Medical Society, on June 5, while attending the A.M.A. meeting in Cleveland.

Crownhart, a newspaper man by training, had been executive secretary of the Wisconsin society since 1923. He was an indefatigable, efficient worker, an able administrator, and a man held in high esteem by members of that society and by his fellow-executive secretaries in other states. Crownhart's death removes from the ranks of the executive secretaries of the various state medical societies one whose judgment was respected by his colleagues.

For years Crownhart had burned the candle at both ends, so to speak, in the interests of the medical profession and medical organization of his native state. Like too many physicians he failed to heed the advice—"slow up a little"—which is given to patients. It will be difficult for the Wisconsin society to replace Crownhart with a man of such wide experience and excellent qualifications. The profession of that state will miss him, as will his many friends among the active workers in medical organization throughout the country.

Here is another clear indication that high-speed organization activities cannot be a one-man arrangement and that the responsibilities and work must be distributed throughout efficient committees. By this method, greater efficiency is obtained and the well-being of all better protected.

In the midst of world-wide, tragic upheaval, there is need for many a level head, and need for stable, sane adherence to the high principles of our profession.—J. Sharp Wilson, M.D., President of the Stark County Medical Society.

Veto May Result in Real Solution for Board's Problem

Those who had followed the course of House Bill 198 through the House and Senate at the recent regular session of the Ninety-Fourth Ohio General Assembly were mildly surprised when the measure was vetoed by Governor Bricker.

This bill had the active support of the Ohio State Medical Association and the State Medical Board. It proposed a $10.00 increase in the fee charged applicants to take the examinations for a license to practice medicine and surgery in Ohio, making it $35.00; a $10.00 increase in the fee charged for the issuance of a license through reciprocity, making it $60.00; and a $5.00 fee for the filling out of credentials for physicians desiring to leave Ohio and to practice in another state. The purpose of the bill was to raise approximately $5,000 annually in additional funds for the use of the State Medical Board which would have enabled the Board, if the money were to be appropriated by the Legislature or the Emergency Board, to employ an additional inspector and another clerk for the Board's office.

In his veto message which was sustained by the General Assembly, the Governor said: "I am returning House Bill 198 to you disapproved. This increases the amount to be paid by applicants for examination for the right to practice medicine. Twenty-five dollars is a reasonable fee for this examination. The money goes into the general revenue fund anyway. It is not available for the board either in the giving of examinations or in the enforcement of any of its rules or regulations or statutory authorities. A boy getting through medical college is possibly more hard pressed for money than any other time in his life and I feel this increase is an undue burden."

No one is going to argue with Governor Bricker about his attitude on this proposal. He made an especially good point when he stated that, in the final analysis, the additional money would not be available to the Board unless the Legislature or Emergency Board felt disposed to make the funds available to the Board. Sponsors of the bill realized this. However, they felt that the Board would be in a stronger position to ask for additional, necessary funds if it could show that the Board had sufficient income to justify an additional appropriation. This would be the case had the bill become a law. There was no desire to place an unjust penalty on the recent medical school graduate. Whether the bill would have done that is, of course, a matter of personal opinion. The veto in the end is not a serious matter—perhaps the Governor is 100 per cent correct in the action he took.

The principal question now is: What procedure is to be adopted to provide the State Medical Board with the financial assistance which it badly needs? It is quite likely that the income of the

Board annually under present fees is sufficient to provide the Board with the necessary additional personnel. But, neither the Legislature nor the Emergency Board has seen fit in the past to grant the Board's request for additional money, despite the fact that the Board has a neat balance to its credit in the General Revenue Fund. In other words, if the Legislature had followed the policy of letting the Board use all of its income, which would just about meet the Board's needs, there would have been no need for the introduction of House Bill 198.

If the introduction of House Bill 198 and its subsequent veto have brought this situation into the open, considerable good has been accomplished. It is understood that Governor Bricker is sympathetic to the needs of the Board and has indicated, unofficially, that he will personally endeavor to obtain adequate operating funds for the Board. We are confident that the Governor is sincere. Thus, there is reason to assume that the Board's problem will be solved without legislation, making the veto of House Bill 198 of little or no importance—especially if the Governor follows through, which we have reason to believe he will do.

The success of an organization rests in the sincere interest and the cooperative spirit of all of its members, and particularly of those who are delegated to serve in official capacities.—Medical News, Providence, R. I.

We're Sorry, Dr. Winters, But We Don't Need Your Help in Ohio

Ohio physicians have been receiving postal cards from a Dr. R. A. Winters requesting them to attend a "condensed postgraduate course" in "ambulant therapy" which Winters offers through a series of lectures given at various hotels in different parts of the state. It hardly seems necessary to comment on this "postgraduate course". But there have been inquiries, and inquiries always indicate that the matter should not be dismissed too lightly.

In the first place, opportunities in Ohio for postgraduate medical education in all fields are numerous and of the best. An Ohio physician does not have to enroll in "courses" of the kind advertised by Winters to keep himself up to date.

Secondly, who is Winters? His literature states that "his work is nationally recognized". Ever heard of him? Neither had we until the inquiries started to come in.

In the third place, we wonder if this is the same R. A. Winters who some years ago was connected with a firm distributing an alleged "diabetes cure" which was exposed by the A.M.A.? Also, we wonder if this is the R. A. Winters who is said to be the dean of the "American College of Physical Therapy", 5 North Wabash Avenue, Chicago, which conducts a so-called school for technicians but which school has been found unsuitable for recognition by the A.M.A.? Of course, the initials "R.A." and the address "5 Wabash Avenue, Chicago", given on the postal cards being distributed in Ohio, may be merely interesting coincidents—but, we wonder.

At any rate, we believe that "advanced" education of this kind can be of little, if any, value.

There is nothing like a long period of book learning for saving essentially incompetent young people from an early showdown.—Alan Greg, M.D.

Some Good Advice Which the Doctor Can Give Vacationists

This is the time of the year when many families visit the family physician for a check-up prior to starting their vacation trips. If they don't do this, they should. At any rate, the family doctor must be ready to pass out some valuable tips at the time he makes the physical check-up of Mom, Pop, Willie, Mary, and the rest.

Writing in a recent issue of *Hygeia*, the A.M.A. health magazine, Arthur Levin, M.S., Iowa City, offers some good advice to folks about to start out on a vacation jaunt. It also contains some suggestions which can easily enough be passed on by the family physician to his patients.

"So many of us have lived in the sheltered safety of our modern towns and homes that we do not realize the possible dangers in less guarded parts of this country and foreign lands—places where sanitary and health inspectors never visit," Mr. Levin says. "A drink from a cool brook, fresh fruits from a roadside stand, hamburgers at that not-too-clean restaurant may be dangerous. Disease lurks in the little things and doesn't give second chances if 'you didn't know'."

However, Levin adds, by taking some simple precautionary measures before a trip and observing a few simple rules on the way, much of the danger from disease may be eliminated.

He suggests that the precautionary measures to be taken should fall into two categories, those attended to before the vacation trip and those which should be observed while on the way.

"Preventive measures to be taken before the trip," Levin declares, "concern two of the most ravaging yet easily controllable diseases, smallpox and typhoid fever. . . .

"The one sure way of becoming immune to smallpox is through vaccination. . . . The protective level of immunity in most cases lasts only about five to seven years and then gradually falls off. Therefore, to be absolutely certain of protection, it is important to be revaccinated after the normal period of immunity has elapsed. The second inoculation usually provides immunity for the rest of one's life. . . .

"Typhoid fever, another ever present menace, is also easily avoided through vaccination. The typhoid bacillus causing the disease is passed from the bodies of persons either showing clinical symptoms of the disease or persons who do not show any symptoms and yet harbor the bacteria. These latter are known as carriers. Typhoid carriers are more dangerous than criminals, because unknowingly and unknown they may contaminate everything they touch and cause hundreds of new cases each year. . . . In addition, water contaminated by sewage, privies or cesspools is another source of infection. Milk as well as milk products may be contaminated. . . . The danger of this infection is so widespread that the safe and smart thing to do is to be vaccinated against typhoid."

Levin points out that the three most dangerous sources of disease that one acquires on the trip are the three most important elements in everyday life: water, milk and food. Water is the most easily contaminated of the three. He suggests that while traveling, it is best to carry a one or two gallon thermos jug, to be filled at reliable sources. He warns against the danger of sucking ice or using ice made from polluted water to cool drinks.

"There is only one cardinal rule concerning milk: 'Drink only pasteurized milk,'" Levin declares. Although many people have been drinking unpasteurized milk all their lives and are still healthy, that milk may have been inspected, tested and under constant supervision, he explained, but it is not as safe as the pasteurized supply.

"The only criterion for safe food is cleanliess. Food, no matter how thoroughly cooked, if served in a dirty environment is not safe. . . . A restaurant that it not too careful in keeping its table section clean will certainly not be too fastidious about its unobserved kitchen. . . .

"Now don't clutch Junior to your bosom and cancel all plans for that trip. The few simple precautions to be taken require little if any deviation from normal life and will adequately protect and free you from anxiety."

A physician's inability or disinclination to write a reputable prescription is a sign of therapeutic decadence.—Rocky Mountain Medical Journal.

Warning Against a Dangerous "Remedy" For Appendicitis

Authorities in Ohio, and probably by this time Federal authorities, are making an investigation of the sale in this state of an alleged appendicitis "remedy" being sold by one W. O. DeBerry of Wilmot, R.F.D., Stark County, who uses Beach City, Stark County, as his mailing address.

DeBerry calls his stuff "Non-Cut Appendicitis Remedy" and suprisingly enough, he has built up quite a market in Eastern Ohio. It sells for $10 for four ounces. One would think that the price alone would be enough to create sales resistance, but apparently this is not the case. Even after laying 10 bucks on the line and getting a bottle of this valuable fluid, one would expect the purchaser to get rid of it in a hurry after reading the label. But, this has not been the case, judging by some of the unhappy experiences of those who have used the "remedy".

Believe it or not, here are the instructions issued to each purchaser of "Non-Cut":

"We do not diagnose, but after some reliable Doctor has told you that you have Appendicitis, send at once for Non-Cut Appendicitis Remedy, and when it arrives, thoroughly bathe the affected part with hot cloths to open up the pores, then dry the part well and apply Non-Cut liberally by rubbing affected part gently with palm of the hand, continuing to apply Non-Cut liberally till relief is obtained, then apply only every hour for a few hours. Castor Oil, or some other gentle laxative should be taken freely for day or two to keep bowls (sic) open."

Certainly a stop should be put to the sale of this worthless nostrum with its label containing advice which is a real menace to the health and life of anyone gullible enough to heed it. The State Medical Association is pressing for an investigation which it is hoped will end this travesty. In the meantime, physicians should warn their patients not only against this but other crack-pot "remedies" for appendicitis. The public cannot be told too often to beware of worthless medicines and unorthodox advice on health matters.

More Than 200 Attend Dinner Held in Honor of Dr. Upham on June 6

Approximately 250 colleagues and friends of Dr. J. H. J. Upham attended the appreciation dinner given in his honor by the faculty of the Ohio State University, College of Medicine, at the Neil House, Columbus, Friday, June 6. Dr. Upham will retire as Dean of the College of Medicine on September 1.

Dr. Leslie L. Bigelow, professor of surgery, was toastmaster. Tributes to Dr. Upham were expressed by Governor John W. Bricker; H. S. Atkinson, chairman of the Board of Trustees of the University, who announced that the Board had appointed Dr. Upham Dean-Emeritus of the College of Medicine; H. L. Bevis, President of the University; Dr. Wm. M. Skipp, Youngstown, Immediate Past-President of the Ohio State Medical Association; Dr. C. C. Sherburne, President of the Columbus Academy of Medicine; Dr. H. M. Platter, Secretary of the State Medical Board; F. M. Flickinger, member of the Senior Class of the College; and Dr. V. A. Dodd, professor of surgery and chief-of-staff of University Hospital. A book containing the signatures of all who attended the dinner was presented to Dr. Upham who, in response, recounted the development of the College of Medicine in the past 15 years and expressed his appreciation for the cooperation which he had received from his associates.

Plans for the dinner were in charge of a committee consisting of Dr. Russel G. Means, chairman; Dr. Rollo C. Baker, Dr. Solomon A. Hatfield, Dr. Bigelow, Dr. Platter, assisted by Mrs. R. C. Baker, Mrs. S. A. Hatfield and Mrs. Margaret Rose Colburn.

Nutrition for Defense: The Nation's Program

JONATHAN FORMAN, M.D., Columbus, Ohio
Editor, The Ohio State Medical Journal

EARLY in President Roosevelt's plan for total defense it was recognized that no country can be strong whose people are not healthy and that no people can be healthy who are not well nourished.

A National Advisory Committee to consider this question was set up under the direction of M. L. Wilson, the Director of the Agriculture Extension Service, U.S. Department of Agriculture. The president of the land-grant universities were asked to appoint state committees to organize the various states. This was done in Ohio and the Ohio Committee on Nutrition for Defense invited the Ohio State Medical Association to designate the writer as its representative. This was done by The Council of the Association.

The National Committee under Mr. Wilson soon became the Nutrition Advisory Committee of the Coordinator of Health, Welfare, and Related Defense Activities and its component State Committees were charged with the responsibility of organizing and coordinating the various interested public and private agencies to the end that all the people should know of the startling new facts in nutritional sciences and that these facts can play an important part in keeping their family's health high and their spirits up no matter what the drain of defense work on their homes and lives may be.

CONFERENCE IN WASHINGTON

The President of the United States then called a conference in Washington on May 26, 27, and 28, 1941, of the leaders in the field of medicine and public health, dentistry, nursing, social work, home economics, nutrition, agriculture, education, labor, food, industry, governmental, and community organization. This was the first conference of its kind ever to be held in the United States and the third conference of this character to be called by a President of the United States—President Theodore Roosevelt called the first on conservation, President Hoover the second on child welfare and now the third has been held on nutrition.

Five hundred and forty-seven delegates responded from every state and the Island of Hawaii. The number of physicians was not large and those in private practice were few indeed. Those holding the M.D. degree representing Ohio were the writer; Dr. Emery Hayhurst, Columbus; Dr. Russell Haden, Cleveland; Dr. R. H. Markwith, Columbus; and Dr. Thomas D. Spies of Cincinnati.

Tribute should be paid to the statesmanlike viewpoint and the efficient but democratic manner in which Paul V. McNutt, the Coordinator of Health, Welfare, and Related Defense Activities, conducted this conference. Composed as it was of scientists and lay people holding so many different views, it could have easily been made the sounding board for new and strange reforms but such was not done. The delegates themselves for the most also realized the seriousness of the meeting and almost all agreed at the outset that all pronouncements of the conference must be established facts.

This made of the conference a meeting of great importance to the physicians of America and not another unfriendly gathering in Washington intent upon stabbing the American doctor in the back. In all of this McNutt's leadership stood out. It gave the physicians who were there work to do or a job into which they could sink their teeth. The physicians of America came out of the conference a little bit better understood even by those who wish to misunderstand them. The conference will stand as an historical event in the history of the health of the United States.

SPEAKERS AT OPENING SESSION

On the morning of the first day, the conference set about the job of drawing up recommendations to the President of the United States for the best ways to put the American people on a nutritionally sound basis. During the course of the deliberations, the conference was addressed by Mr. McNutt; Russell M. Wilder, M.D., Mayo Clinic, Chairman, Food and Nutrition Committee, National Research Council; M. L. Wilson, Director of Extension Work, United States Department of Agriculture; Charles P. Taft, Assistant Coordinator of Health, Welfare and Related Defense Activities; John R. Murlin, Professor of Psychology, University of Rochester, N. Y.; Henry C. Sherman, Professor of Nutrition, Columbia University; Henry A. Wallace, the Vice-President of the United States; Claude R. Wickard, Secretary of Agriculture; Adolf A. Berle, Jr., Assistant Secretary of State; Frances Perkins, Secretary of Labor; Harriet Elliott, Consumer Advisor, Office of Price Administration and Civilian Supply, Office of Emergency Management; Lewis B. Hershey, Deputy Director, National Selective Service System; Thomas Parran, M.D., Surgeon General, United States Public Health Service; and Mrs. Franklin D. Roosevelt.

This parade of personages prominent in the present Federal Administration only provided color and a background for the very serious deliberations of the various sections and subsections. The conference was broken up into groups of about 30 delegates—15 such groups in all. In each instance these were led by outstanding authorities.

SUBJECTS STUDIED BY SECTIONS

The leaders of these groups and the subjects which they explored and prepared recommendations were: Research and the National Nutrition Problem by Dr. E. E. McCollum; Economic Policy and Social Responsibility as Related to Nutrition by Mrs. Lucy Gillett, director of nutritional work for the Community Service Society of New York—a second group on this same topic was led by Dr. Hazel Kyrk from the University of Chicago; The Public Health and Medical Aspects of Nutrition as it Relates to Pregnant Women, Lactating Mothers, and Children by Dr. Richard Mason Smith of Harvard; Public Health and Medical Aspects of Nutrition by Dr. James S. McLester of Birmingham, Alabama; Nutrition for Defense Workers in Industry by Dr. Frank G. Boudreau, once of the Ohio Department of Health and after that of the League of Nations, now Director of the Milbank Memorial Funds; Methods of General Education in Nutrition by Mrs. Mildred Weigley Wood of Phoenix, Arizona, the woman responsible for the department of home economics in the University of Minnesota; Methods of General Education in Nutrition by Miss Dorothy G. Williams from the New York State College of Home Economics; Professional Education In Nutrition by Dr. John H. Musser of Tulane University School of Medicine; Professional Education in Nutrition by Dr. Lydia J. Roberts of the University of Chicago; Distribution and Processing of Foods by Dr. Lawrence V. Burton, Editor "Food Industries"; Distribution and Processing of Foods with Reference to Consumer Problems by Hector Lazo, Executive Vice-President of the Cooperative Food Distributors of America; Community Planning for Nutrition in Rural Communities, Dr. H. G. Ramsower of the Ohio State University; Community Planning for Nutrition in Urban Communities by Dr. Howard Y. McCluskey of University of Michigan and the American Youth Commission; Nutrition Problems In Group Food Service by Miss Alberta MacFarlane, educational director of National Restaurant Association and the same problems in school lunches by Mrs. Katherine Ansley of the University of Illinois.

Chart of Recommended Daily Allowances for Specific Nutrients

Committee on Foods and Nutrition, National Research Council

	Calories	Protein gms.	Calcium gms.	Iron mgs.	Vit. A I.U.	Thiamin (B-1) mgs.	Ascorbic acid (C) mgs.	Ribo-flavin mgs.	Nicotinic acid mgs.	Vitamin D. I.U.
Man (70 Kg.)										
Moderately active	3000	70	0.8	12	5000	1.8	75	2.7	18	
Very active	4500					2.3		3.3	23	
Sedentary	2500					1.5		2.2	15	
Woman (56 Kg.)						1.8				
Moderately active	2500	60	0.8	12	5000	1.5	70	2.2	15	
Very active	3000					1.8		2.7	18	
Sedentary	2100					1.2		1.8	12	
Preg. (latter half)	2500	85	1.5	15	6000	1.8	100	2.5	18	400-800
Lactation	3000	100	2.0		8000	2.3	150	3.0	23	400-800
Children up to 12 years										
Under 1 year	100 per kg.	3-4 per kg.	1.0	6	1500	0.4	30	0.6	4	400-800
1-3 years	1200	40	1.0	7	2000	0.6	35	0.9	6	
4-6 years	1600	50	1.0	8	2500	0.8	50	1.2	8	
7-9 years	2000	60	1.0	10	3500	1.0	60	1.5	10	
10-12 years	2500	70	1.2	12	4500	1.2	75	1.8	12	
Children over 12 years										
Girls—13-15 years	2800	80	1.3	15	5000	1.4	80	2.0	14	
16-20 years	2400	75	1.0	15	5000	1.2	80	1.8	12	
Boys—13-15 years	3200	85	1.4	15	5000	1.6	90	2.4	16	
16-20 years	3800	100	1.4	15	6000	2.0	100	3.0	20	

SOME IMPORTANT RECOMMENDATIONS

Out of the deliberations of these groups came a long list of recommendations serving to emphasize just how broad a problem nutrition is and how many fields and interested groups it touches. Of special interest to physicians were the following recommendations to the conference which were then adopted by the conference to be incorporated in the final recommendations to the President of the United States.

From Section VI, Professional Education in Nutrition: "At present, there are few physicians, dentists, or public health officers who are qualified to take authoritative positions in the field of nutrition, but the need for them is very great. This situation urgently requires remedies in each of the three following ways: (1) Better training in nutrition for medical, dental, and public health students; (2) extensive postgraduate courses in nutrition for physicians, dentists, and public health officers; (3) development of a certain number of physicians and dentists with a broad and extensive knowledge of the general field of nutrition and with sufficient experience in the recognition of nutritional diseases to provide expert medical and dental advice to public school teachers, social workers, public health nurses, nutritionists, practitioners of medicine and dentistry, and many others concerned with the nutritional needs of the people".

BOOST FOR NATURAL FOODS

Also there came from the two sections on Public Health and Medical Aspects of Nutrition the following: "It is the opinion of this section that all the essential nutrients can and should be provided through natural foods. We recommend fish oil as the source of Vitamin D since it also augments the intake of Vitamin A. We appreciate that the utilization of an adequate diet by children is significantly affected by food habits. We recommend that in the general nutrition program increased emphasis be placed on the importance of the nutritive requirements of pregnant and lactating women. In providing this we appreciate the necessity for taking into consideration the whole family situation and the limitations of the family budget. We offer the following recommendations: That departments of health recognize that they have a large responsibility in the nutrition programs in their respective communities; that closer cooperation between medical and public health agencies be established and that the need for this cooperation be called to the attention of organized medical and public health groups everywhere; that efforts be made to stimulate greater interest in nutrition problems among the general practitioners of medicine and with this in view that opportunity for postgraduate training in nutrition be made more widely available; that medical societies, dental societies, and health authorities be represented on all state and community nutrition committees and that medical groups take an increasingly active part in organizing, sponsoring, and cooperating in nutrition programs; that medical societies be asked to form nutrition committees for the purpose of disseminating nutrition information through symposia, lectures, speakers' bureaus, exhibits, motion pictures and other methods; that recognition that robust health should be preserved by the use of adequate diets where available and that vitamin pills and concentrates of adequate potency be used only to supplement diets which are necessarily inadequate and by physicians for the treatment of deficiency diseases".

The section endorsed the action of the Food and Nutrition Committee of the National Research Council in presenting a Chart of Recommended Daily Allowances for Specific Nutrients. This complicated yard stick for measuring the American menu will have to be carefuly studied and translated into simple terms of the usual food items consumed by the group. There is but one set of dietary requirements for well people which may need reinforcements under special stress, such as pregnancy, but these strains are not so significant if each has always eaten correctly and has a reasonable reserve of such of these important essentials as can be stored in the human body.

Government In Need of Nurses; Civil Service Examinations Scheduled

As a part of the National Defense Program, the Federal Government months ago began preparation to meet an anticipated need for an unusually large number of nurses, both in its military and civil services. The United States Civil Service Commission has announced open continuous examinations to secure nurses, but despite these examinations, there is a continuing acute shortage of nurses for the civil service positions.

Two examinations are now open for receipt of applications. One—Announcement No. 38—under the title of public health nurse, $2,000 a year, and graduate nurse, $1,800 a year (for general staff duty) is open for the U. S. Public Health Service and the Indian Service, including Alaska. This is an "unassembled" examination, that is, applicants are not given a written test but are rated on their professional training and experience as shown in their applications and by other evidence. The other—Announcement No. 100—under the title of junior graduate nurse, $1,620 a year, is for the U. S. Public Health Service, the Indian Service, and the Veterans' Administration. This examination now includes a written test. It is expected, however, that it will be closed soon and reannounced as an "unassembled" examination. The Civil Service Commission does not expect to require a written test of persons who have already filed their applications but who have not been given their test.

According to the Civil Service Commission, the need for nurses is immediate. Nurses desiring further information should apply at the office of the secretary, Board of U. S. Civil Service Examiners at any first or second-class post office, or write to the U. S. Civil Service Commission, Washington, D. C.

Open New Offices

Ohio physicians who have recently opened new offices include the following: Dr. Robin T. Sharp, Columbus; Dr. J. E. Pettress, Elyria; Dr. M. V. Sheets, Columbus; Dr. Robert Daly, Newcomerstown; Dr. Frederick Eberstadt, Ashtabula; Dr. Robert B. Hines, Barnesville; Dr. Michael T. Palen, Canton; Dr. Earl W. Euans, Magnetic Springs.

Progress in Health Program Reported by NYA; In Operation in 27 Counties; Tentative Plans Agreed on in 24 Others

INFORMATION obtained from the headquarters offices of the National Youth Administration in Ohio indicates that its state-wide youth health program, now in its third month, is getting well under way in many parts of the state. Based on a fundamental policy of cooperation approved by The Council of the State Association on February 16, the plan of physical examinations for NYA youths in Ohio was actually started in April and, at the time this was being written, more than 2,200 such examinations had been cnducted.

Under the direction of Mr. Merrill L. Dawson, state supervisor, the program is being carried on in the eight NYA areas in which the state is divided. Dr. Carl A. Wilzbach, of Cincinnati, is serving as medical advisor. Area supervisors and their regional offices are: Mrs. Helen Koetz, R.N., Columbus; Miss Mary Louise Brehaut, R.N., Toledo; Mrs. Lucille Sharpe, R.N., Lima; Miss Margaret Kerns, R.N., Cincinnati; Miss Helen Deber, R.N., Portsmouth; Miss Dorotha Bell, R.N., Zanesville; Miss Mildred Dorod, R.N., Cleveland; and Miss Mary A. Ivanko, Akron. At the outset of the program Lucy Clark, M.D., had charge of the Columbus area office.

ABOUT HALF STATE COVERED

At present the program is actually in operation in 27 counties, and in 24 counties preliminary arrangements have been made with officials of the medical societies. No contacts have as yet been established in 30 counties, and in seven counties there has been either no response as yet from the medical societies or else it has not yet been possible to arrive at a satisfactory basis of cooperation.

In the principal counties in each of the eight areas Mr. Dawson himself made the initial contact with the medical society and explained the program. In some of these instances he was assisted by Dr. Wilzbach. Follow-up arrangements were then made by the public health nurses employed to administer the area programs.

It is the intention of NYA officials eventually to expand the health project into most of the remaining counties as soon as it is practicable and feasible. At present, approximately 175 physicians are engaged in the work. As yet, no follow-up remedial or corrective procedures have been undertaken at the expense of the NYA, but it is known that a considerable number of the youth have sought needed treatment from their own physicians after being examined.

PLANS FAIRLY UNIFORM

According to Mr. Dawson, a fairly similar pattern has been followed in most of the counties which have begun the program. The president of the medical society usually appoints an advisory committee, as was suggested in the Council's statement, but in some of the smaller counties the president himself has acted as advisor. In a number of instances, Mr. Dawson says, the advisory committees have not only assisted in working out details of the examination program but have helped the area supervisor to obtain facilities for conducting the examinations.

Records show that in nearly every county the rate of pay to physicians has been agreed upon as $3.00 per hour. Using the forms provided by the NYA, a physician can usually complete three examinations in two hours after he has become accustomed to the routine. The rate of turnover is somewhat faster in counties where the team examination method is employed.

One of the two alternative methods of procedure is now in effect in each of the counties where the program is in operation. In the larger areas the same method is employed. A central headquarters is selected to which all NYA youth are sent for examination, and here a small group of physicians, selected by the county society, works together, each man being responsible for a different part of the examination. In other counties lists of physicians who will perform the examination are agreed upon, and the youths are permitted to select any one from the list. In one or two metropolitan centers NYA health programs were previously in operation, and these have been adapted to conform to the new project.

COUNTIES LISTED

It is not possible to predict what effect the advent of a new federal fiscal year will have on the program. NYA officials, however, believe there will be no important changes effected, and they feel confident there will be no need for curtailment in any respect since the NYA is considered a defense agency.

At the time of writing, the program was in operation in these counties: Adams, Allen, Athens, Champaign, Crawford, Cuyahoga, Franklin, Hamilton, Hancock, Hardin, Knox, Lawrence, Lucas, Madison, Marion, Mercer, Miami, Montgomery, Morrow, Putnam, Richland, Ross, Scioto, Shelby, Trumbull, Van Wert, and Vinton.

Preliminary arrangements have been made or programs were pending in the following counties: Butler, Clinton, Columbiana, Coshocton, Darke, Defiance, Delaware, Erie, Fayette, Gallia, Guernsey, Henry, Hocking, Huron, Jackson, Licking, Mahoning, Meigs, Muskingum, Paulding, Stark, Warren, Williams, and Union.

In Memoriam

Van Ingersoll Allen, M.D., Creston; Eclectic Medical College of Ohio, Cincinnati, 1907; aged 58; member of the Ohio State Medical Association and the American Medical Association; died May 30. Dr. Allen practiced in Creston for 30 years. He died in Florida while on vacation. Dr. Allen was a member of the Masonic Order, Odd Fellows, Loyal Order of Moose, and the B.P.O.E. His widow, a son and a sister survive.

James Finley Hanna, M.D., Adena; Medical College of Ohio, Cincinnati, 1895; aged 75; died May 29. Dr. Hanna retired in 1936, after having practiced in Adena for 41 years. Surviving are one son, three daughters and a sister.

James M. Holtz, M.D., Canfield; Columbus Medical College, 1880; aged 91; died June 1. Dr. Holtz, who was retired, practiced in Alliance for many years. A son and a sister survive.

Jacob D. Lower, M.D., Coshocton; University of Wooster, Medical Department, Cleveland, 1887; aged 77; member of the Ohio State Medical Association and the American Medical Associaiton; died May 20. A practicing physician for 54 years, Dr. Lower began his medical career at Bakersville, locating in Coshocton in 1906. He was secretary of the Coshocton County Medical Society for 30 years. From 1934 to 1939 Dr. Lower was health commissioner of Coshocton, and during the last World War he was in the service of the Medical Corps of the U.S. Army, stationed at a hospital in New Haven, Conn. He was a member of the Presbyterian Church, the American Legion, Masonic Order and the Odd Fellows. Surviving are his widow, a daughter and a brother, Dr. William E. Lower, Cleveland.

Albert Graeme Mitchell, M.D., Cincinnati; University of Pennsylvania School of Medicine, Philadelphia, 1910; aged 52; member of the Ohio State Medical Association; Fellow of the American Medical Association; diplomate of the American Board of Pediatrics, Inc.; member, American Pediatric Society, American Academy of Pediatrics, Central Society for Clinical Research; died June 1. One of the nation's outstanding pediatricians, Dr. Mitchell had been B. K. Rachford professor of pediatrics at the University of Cincinnati College of Medicine since 1924. After practicing medicine from 1912 to 1922, he was named associate in pediatrics at the University of Pennsylvania School of Medicine, a post which he held for two years. During the last World War Dr. Mitchell served in France as a captain in the Medical Corps of the U. S. Army. Well known throughout the country, Dr. Mitchell had written extensively on the subject of pediatrics and had appeared on the program at many state and national medical meetings. At the time of his death, he was not only medical director and chief of staff of the Cincinnati Children's Hospital, but was director of the Children's Hospital Research Foundation and director of pediatrics and contagious diseases at the Cincinnati General Hospital. In 1927 and 1928 Dr. Mitchell was president of the Daniel Drake Society. He also held membership in Sigma Xi, Alpha Mu Pi Omega and Pi Kappa Epsilon. Non-medical organizations in which he was active included the Literary Club, University Club and the Cincinnati Country Club. An accomplished artist, Dr. Mitchell expressed himself in water-color, oil paints, etching and dry-point. A number of his works decorate offices in Children's Hospital and the Research Foundation. Surviving Dr. Mitchell are his widow, twin daughters, and his father.

Wallace K. Mock, M.D., Cleveland; Eclectic Medical College, Cincinnati, 1889; aged 77; died May 24. Dr. Mock practiced on Cleveland's West Side for many years. At the time of his death he was head of the dispensary at Fairview Hospital. Dr. Mock was a member of the Masonic Order. His widow survives.

Otho James Powell, M.D., Ashland; Western Reserve University School of Medicine, Cleveland, 1898; aged 71; member of the Ohio State Medical Association and the American Medical Association; died May 24. Dr. Powell retired in 1939 after having practiced in Ashland for 40 years. An active member of the Ashland County Medical Society, he had served the society as president, vice-president and delegate. Dr. Powell was a member of the City Board of Education for four years and served on the Samaritan Hospital staff prior to his retirement. Surviving are his widow, one son and one sister.

Isaac Smith Putnam, M.D., Dillonvale; Ohio State University College of Medicine, 1911; aged 52; died June 5. Formerly of Millersburg, Dr. Putnam located in Dillonvale 19 years ago. During the last World War he served in the Medical Corps of the U.S. Army. Dr. Putnam was a member of the American Legion. His widow, two daughters and two brothers survive.

Everett Chaney Robbins, M.D., Chillicothe; Ohio State University College of Medicine, 1917; aged 49; member of the Ohio State Medical Association and the American Medical Association; died June 4. Dr. Robbins practiced in Chillicothe for 13 years. During the last World War he served overseas as a lieutenant in the Medical Corps of the U.S. Army. Dr. Robbins was a member of the American Legion, the Elks Lodge and Sigma Nu. His widow and a daughter survive.

Henry Frederick Rohrs, M.D., Napoleon; Jefferson Medical College of Philadelphia, 1895; aged 66; former member of the Ohio State Medical Association and the American Medical Association; died May 17. Dr. Rohrs practiced in Henry County for over 40 years. He was a former secretary of the Henry County Medical Society, which he had also served as legislative committeeman. Dr. Rohrs was an officer of the Medical Corps of the U.S. Army during the last World War. He was a member of the Elks Lodge and the American Legion. His widow and a daughter survive.

Robert Thomas Poling, M.D., Columbus; Ohio State University College of Medicine, 1925; former members of the Ohio State Medical Association and the American Medical Association; died June 8. A native of Darke County, Dr. Poling practiced in Greenville for 14 years. Since last September he had been resident physician at the Franklin County Tuberculosis Sanitorium. Dr. Poling was a member of the Masonic Lodge, the Christian Church and the Elks Lodge. Surviving are his widow, one son, his father and mother, Dr. and Mrs. J. C. Poling, Ansonia, and two sisters.

Theodore Adolphus Saupert, M.D., Toledo; Toledo Medical College, 1912; aged 75; died May 14. Prior to studying medicine Dr. Saupert was a pastor in the Lutheran Church. He had practiced in South Toledo for 25 years. He is survived by his widow and a sister.

Merle Edison Scott, M.D., Massillon; Ohio State University College of Medicine, 1920; aged 52; former member of the Ohio State Medical Association and the American Medical Association; Fellow of the American College of Surgeons; diplomate of the American Board of Otolaryngology; died May 20. Dr. Scott had practiced in Massillon for nearly 20 years. He was previously located in Chicago for two years. Active in medical circles, Dr. Scott was president of the Stark County Medical Society in 1935 and a delegate to the Ohio State Medical Association in 1929 and 1930. He was chief of the eye, ear, nose and throat department of the Massillon City Hospital, and a former member of the city council. Dr. Scott was a member of the Presbyterian Church, Masonic Lodge, Delta Tau Delta, Alpha Kappa Kappa and the American Legion. Surviving are his widow, a son, two brothers and two sisters.

Lamora Shuey, M.D., Toledo; Toledo Medical College, 1898; aged 79; former member of the Ohio State Medical Association and the American Medical Association; died May 25. One of the first woman physicians to practice in Toledo, Dr. Shuey located there in 1898. After 19 years in general practice she became chief anesthetist at Robinwood Hospital, a post which she relinquished in 1936 because of ill health. Dr. Shuey was a charter member of the International College of Anesthetists. A daughter and a brother survive.

Charles August Stammel, M.D., Ft. Lewis, Washington; University of Cincinnati College of Medicine, 1910; aged 55; Fellow of the American Medical Association; diplomate of the American Board of Radiology, Inc., and member of the Radiological Society of North America, Inc.; died May 26. Dr. Stammel, a native of Cincinnati, was a lieutenant-colonel in the Medical Corps of the U.S. Army. From 1912 to 1919 he practiced in Cincinnati, during which time he was a member of the Academy of Medicine of Cincinnati and the Ohio State Medical Association. Col. Stammel entered the Army at the beginning of the last World War, and had been in the service ever since. Surviving are his widow and two sisters.

Walter Gustav Stern, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1898; aged 67; member of the Ohio State Medical Association; Fellow of the American Medical Association; member, American Orthopaedic Society and the International Orthopaedic Society; Fellow of the American Academy of Orthopaedic Surgery and the American College of Surgeons; diplomate, American Board of Orthopaedic Surgery; died June 9. Dr. Stern practiced in Cleveland for 40 years. He was consulting orthopedic surgeon at St. John's, Mt. Sinai, Glenville and Lutheran Hospitals. Dr. Stern was one of the founders of the Ohio Crippled Children's Society and a sponsor of the Crippled Children's Act passed by the Ohio legislature 25 years ago. Surviving are his widow, a daughter and a son.

Clarence Wesley Tunison, M.D., Cincinnati; University of Cincinnati College of Medicine, 1912; aged 53; member of the Ohio State Medical Association and the American Medical Association; died May 23. Dr. Tunison practiced in Cincinnati for nearly 30 years. He was a member of the Jr. O. U. A. M., Woodmen of the World, Daughters of America, the Masonic Order, and the Methodist Church. His widow, a son, his mother and a sister survive.

John D. Westrick, M.D., Defiance; Toledo Medical College, 1888; aged 79; former member of the Ohio State Medical Association and the American Medical Association; died May 24. Dr. Westrick practiced in Defiance for over 50 years. He served as city health commissioner for 35 years prior to his retirement in 1939 because of impaired health. Dr. Westrick was county coroner for 10 years and had been a member of the local library board. He was a member of the Catholic Church and a charter member of the local Knights of Columbus lodge. Surviving are his widow, a daughter, three sons and two brothers.

Edgar Allen Whitmer, M.D., Columbus; Starling Medical College, Columbus, 1900; aged 66; died May 10. A native of Thornville, Dr. Whitmer for many years served in the medical department of the Norfolk and Western Railroad at Louisvill, Ky., and Williamson, W. Va. His widow, a daughter and a son survive.

Julien Harmon Wilson, M.D., Columbus; Ohio State University College of Medicine, 1922; aged 49; member of the Ohio State Medical Association and the American Medical Association; died May 25. A native of Georgia, Dr. Wilson practiced in Columbus for 19 years. He was on the staffs of St. Francis and White Cross Hospitals, and was medical examiner of Franklin County Draft Board No. 8. Prominent in Negro activities in the community, Dr. Wilson was a member of the Episcopal Church, the Masonic Order and the Elks. His widow and his mother survive.

William Saunderson Yeager, M.D., Cocoa, Florida; Medical College of Ohio, Cincinnati, 1908; aged 58; member of the Ohio State Medical Association and the American Medical Association; died May 25. A former Putnam County health commissioner and physician at Leipsic, Dr. Yeager moved to Florida about two years ago and purchased a citrus fruit farm. He was an ardent student of horticulture.

State Association Presents Exhibit at Dayton Centennial Celebration

Through arrangements made by the Bureau of Public Education, of the State Association, an exhibit depicting medical progress was included among the educational exhibits of the "Frontiers of Freedom" celebration, commemorating the 100th anniversary of the chartering of Dayton, which was held in that city June 14 through 22. It was jointly sponsored by the Ohio State Medical Association and the Montgomery County Medical Society.

The principal portion of the exhibit was borrowed from the Committee on Scientific Exhibits of the American Medical Association. This consisted of 10 sets of small molded rubber figures, placed in individual stages, dramatizing outstanding feats in American medical history. Included in the subjects were the first ovariotomy, the first use of anesthesia, the discovery of the gas gangrene bacillus, the conquest of yellow fever, etc. Besides these, two of the Bureau's educational posters, graphically portraying continued medical education and the increase in American life expectancy, were included in the exhibit.

Ohio's Death Rate Increased in 1940

Ohio's death rate from all causes jumped from 1033.25 per 100,000 in 1939 to 1137.47 in 1940, according to a 35-page summary of the state's vital statistics for 1940 released by Dr. R. H. Markwith, Director of Health. Marked increase in the deaths by violence or accident was noted, the rate advancing from 96.72 for 1939 to 108.83 for 1940.

The annual report is based on the uniform classifications which are rapidly being universally adopted by health departments. It includes sections on deaths by causes with totals and rates for 1939 and 1940, death totals and rates from 1910 through 1940 separated by sex and by rural and urban location, deaths under one year by cause from 1933 through 1940, deaths in counties and rates for 1938, 1939, and 1940, deaths in rural health districts and deaths in cities for the same period, puerperal deaths and rates from 1910 through 1940, deaths under one year for the same period, stillbirths and rates for the same period, infant mortality rates for 1938, 1939, and 1940, births and birth rates by counties and cities for 1938, 1939, and 1940, accidental deaths by type for 1938, 1939, and 1940, and births by sex and race from 1909 through 1940.

The report shows that the five principal fatal diseases and their total deaths in Ohio in 1940 were: heart disease, 21,808; cancer, 9,446; cerebral hemorrhage, 7,088; pneumonia, 3,834; and tuberculosis, 2,785. Dr. Markwith, discussing this data, pointed out that fatalities from these diseases and from violence and accidents comprised about 52,000 of the state's 78,000 deaths.

The 30-year table of death rates in Ohio shows a steady decline (except during the years of the first World War) from 13.7 per 1000 in 1910 to 11.3 in 1940. Lowest figure was 10.2 in 1938. During the same period infant mortality in Ohio has dropped from 113 per 1000 births to 41, and puerperal deaths decreased from a rate of 93.96 per 10,000 live births in 1918 to 31.86 in 1940.

In 1940 Vinton County proved to be the most prolific, with a birth rate of 22.8 per 1000 population, while Holmes and Ross Counties ran it close second and third. Among the cities, Ravenna can boast of a birth rate of 49.8 in 1940, while Painesville and Salem follow close behind. Honors for health districts with low death rates go to Putnam County with a rate of 8.1 per 1000 population, the Lucas County rural district with a rate of 5.9 per 1000, and the Campbell city district with a rate of 3.0 per 1000.

Speakers at a meeting of the Eighth District of the Indiana State Medical Association, June 11, at Winchester, Ind., included Dr. Max M. Zinninger, assistant professor of surgery, University of Cincinnati College of Medicine, who discussed "Intestinal Obstruction", and Dr. James C. Walker, Dayton, who participated in a symposium on fractures.

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Applicants Totaling 384 Examined by State Medical Board in June; Questions Asked Medical School Graduates

THE semi-annual examinations of the State Medical Board at Columbus, June 11-14, were taken by 384 applicants, of whom 249 sought licenses to practice medicine and surgery.

There were 40 applicants for osteopathic licenses, one of the largest classes in this group in the history of the Board. Other applicants included: 6 chiropractors, 30 mechano-therapists, 39 masseurs, 14 chiropodists, 5 cosmetic therapists and one midwife.

Of the 249 medical school graduates who took the examinations, 60 were from Western Reserve University School of Medicine; 68, Ohio State University College of Medicine; 72, University of Cincinnati College of Medicine, and 49 from out-of-state schools.

Business transacted by the Board included approval of a request for the Nurses' Examining Committee that nurse examinations usually held in December be held late in September this year, in order to help meet the urgent need for more nurses in the various government services.

REGULATION IS AMENDED

The Board amended the rule governing the use of the title "Doctor" or "Dr" by limited practitioners, to read as follows:

"Certificate authorizing the practice of a limited branch or branches of medicine or surgery will confer the right to use the title 'Doctor' or 'Dr', provided such use is qualified by the designation of the limited branch of the certificate holder. The certificate does not permit the holder to treat infectious, contagious or venereal diseases, nor to prescribe or administer drugs or to perform major surgery."

Results of the examinations will be announced at a meeting of the State Medical Board in Columbus, July 22.

Questions asked those who took the medical and surgical examinations were as follows:

ANATOMY

1. Describe the relations of the pancreas.
2. Describe, or make a schematic drawing of the facial nerve and its branches, with areas of distribution.
3. Make a sagittal section drawing of the abdominal cavity showing the reflections of the peritoneum.
4. List the branches of the thoracic and abdominal aorta, stating which come from each division.
5. Name the muscles which adduct the thigh, those which abduct it, and those which cause flexion of it on the trunk.

PHYSIOLOGY

1. Discuss the changes in volume and composition of the urine resulting from functional alterations of the renal blood vessels.
2. Define briefly: (a) vital capacity;
   (b) blind spot;
   (c) auricular fibrillation;
   (d) peristalsis;
   (e) ovulation.
3. Discuss intensity of tactile sensation with regard to receptors stimulated.
4. Describe three ways in which dyspnea may be produced.
5. Discuss perspiration, its function, its cause, and factors increasing or diminishing it.
6. Discuss the relation of the labyrinths to posture.
7. What are the physiological consequences of hyperthyroidism?
   What are the consequences of complete extirpation of the thyroid?
8. What are hormones? Name two and give action and function of each.
9. Give and explain three causes of coma.
10. Discuss lactation, its causes, limitation, increase and decrease.

DIAGNOSIS

1. Define leukemia. Two types.
2. Diagnose subacute bacterial endocarditis.
3. Define acute St. Vitus's dance. (Chorea Sydenham).
4. Differentiate agranulocytosis.
5. Differentiate cancer of liver and give per cent of primary incidence.
6. Differentiate bronchiectasis and bronchogenic carcinoma.
7. Differentiate dermoid cyst of mediastinum and sacular aneurism same region.
8. Differentiate cancer of sigmoid, diverticulum and spastic colitis.
9. Differentiate Vincent's and Ludwig's angina.
10. Differentiate transverse myelitis and cerebral meningitis.

CHEMISTRY

1. Give composition, properties and tests for calomel and corrosive sublimate.
2. Discuss the metabolism of proteids.
3. What is the source of copper in the human economy? How utilized?
4. Name the oxides of carbon. Give sources, properties, uses and effect on human organisms and how eliminated.
5. What is urea? Give sources, uses and end products.

MATERIA MEDICA AND THERAPEUTICS

1. Define and give example of:
   (a) Astringent
   (b) Expectorant
   (c) Oxytocic
2. Discuss the therapeutics and dosage of quinidine sulphate.
3. What effect has atropine on the nervous system?
4. What is a diaphoretic? Name three such drugs and give adult dose of each.
5. Discuss potassium sulphocyanate as to toxicology and therapeutics.
6. What is the optimal concentration of sulfanilamide in the blood stream? Of sulfapyridine?
7. Discuss paraldehyde as a therapeutic agent.
8. In what disease or condition may each of the following be used: (a) delantin sodium, (b) physostigmin, (c) fel bovis, (d) ipecac, (e) corpus luteum?
9. What is the composition of Dover's Powder? Dose and use?
10. Name three respiratory stimulants. Give mode of action of each.

PRACTICE

1. Discuss the symptoms, signs and blood picture of a patient with an iron deficiency anemia and give treatment with illustrative prescription.
2. Give the symptoms of pylorospasm in a two months old infant and name two drugs used in treatment, with dosage.
3. Give the symptoms and signs of tonsillar diphtheria in a child of 10 years, and treatment.
4. Discuss briefly acute rheumatic fever in childhood; symptoms, treatment and complications.
5. Give the etiology, symptoms and treatment of erysipelas.
6. Give the etiology, symptoms and medical treatment of an ambulatory patient with chronic gall bladder disease.
7. Give the symptoms and medical treatment of a case of duodenal ulcer.
8. Give symptoms and treatment of Addison's disease.
9. Define the term "tic" as a nervous disorder and differentiate between an hysterical tic, habit tic, chorea and tic doloureux.
10. Discuss hay fever, symptoms, seasonal occurrence, treatment, preventive and palliative.

BACTERIOLOGY, PATHOLOGY AND HYGIENE

1. Give the following information about the diseases listed below:
   (1) The scientific name of the parasite.

Q. I've noticed that some cans are golden-colored on the inside. Why is that?

A. You've probably noticed that kind of lining on cans for colored products. It's put there to protect their quality principally from a color standpoint. You'll also notice it on certain vegetables and meats. For other products, a plain tin lining is entirely suitable. The lining of the can is adjusted to the needs of the individual food. These can linings are special inert enamels baked onto the tin plate at high temperatures. (1)

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(1) 1941. Canner 92, No. 12, Pt. 2, pages 78-81. 1936 Canner 82, No. 11, Pt. 2, pages 104-105.

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  (2) The portal of entry in man.
  (3) Stages of life cycle met in diagnosing the condition in man.
  (4) Material to be examined for diagnosis.
    A. Tertian malaria
    B. Trichinosis
    C. Hook worm disease
    D. Presence of tapeworm

2. Name 3 virus diseases and discuss means of transmission in causing disease.
3. By what laboratory methods would you diagnose—
   (1) Gonorrhea
   (2) Typhoid Fever
   (3) Pneumonia (type)
   (4) Undulant Fever
   (5) Pernicious anemia
4. Describe the pathology of lobar pneumonia and discuss relation to production of the physical signs in a case.
5. Describe the pathology following a cerebral hemorrhage (apoplexy).
6. What pathologic lesions follow the presence of the dysenteric amoeba?
7. What disease changes occur in persistent high blood pressure in (a) blood vessels, (b) heart, (c) brain and (d) kidney?
8. Outline a program for control of an outbreak of poliomyelitis in a community.
9. In the Autumn hunting season in this region, what infection? warning to hunters would help prevent a serious disease
10. Discuss the requisites for an acceptable milk supply.

SURGERY

1. Discuss the relative merits of treating compound fractures of the extremities by (a) the Carrel Dakin technique, (b) the Orr method.
2. Give the indications for and describe the surgical technique of tracheotomy.
3. Name the frequent causes of hematuria. Give a differential diagnosis.
4. Discuss the postoperative fluid requirements of a patient who has had a laparotomy performed under ether anaesthesia.
5. Give in detail the management of a fracture involving the elbow joint in an adult.
6. Discuss the etiology and treatment of carbuncle.
7. Describe the treatment of (a) acute anterior dislocation of the shoulder and (b) chronic recurrent dislocation of the shoulder.
8. Give the etiology, pathological anatomy, symptoms and treatment of diverticulitis of the descending colon.
9. What examinations would you make on a patient who is unconscious from blow on the head that has just been received? What would be your treatment?
10. Discuss the symptoms, diagnosis, and treatment of a fissure of the anus.

OBSTETRICS AND GYNECOLOGY

1. Discuss the prophylactic treatment of hemorrhage of both mother and baby at parturition.
2. Given an aseptic technique, account for the development, in 48 hours post partum, of a severe pain in right unguinal region, accompanied by chills, fever from 99.6°F. to 102°F., and a pulse rate of 100 to 140.
3. What is meant by eclampsia? Briefly outline treatment.
4. How diagnose a dead foetus at the 6th month of gestation?
5. Discuss briefly three conditions, each one of which would justify interruption of pregnancy before the 8th month.

SPECIALTIES

1. Describe a chancre.
2. Discuss the stages of ether anaesthesia.
3. What is scurvy? How may it be prevented?
4. What is iritis? Give the most frequent causes.
5. Give five or more causes of deafness in one ear.

Dover—Dr. H. E. Reed was entertained by local physicians at the Union Country Club on the occasion of his leaving to begin active duty at the Great Lakes Naval Training Station, Great Lakes, Ill., as a lieutenant commander in the Medical Corps of the U. S. Navy.

Columbus—The life and achievements in science of Dr. Jared Potter Kirtland were honored by Dr. George M. Curtis, principal speaker at a meeting of the Ohio Academy of Science in Cleveland.

Any Physician May Exhibit the Film, "When Bobby Goes to School"

Under the rules laid down by the American Academy of Pediatrics, the new educational-to-the-public film, "When Bobby Goes to School," may be exhibited to the public by any licensed physician in the United States.

All that is required is that he obtain the endorsement by any officer of his county medical society. Endorsement blanks for this purpose may be obtained on application to the distributor, Mead Johnson & Company, Evanesville, Indiana.

Such endorsement, however, is not required for showings by licensed physicians to medical groups for the purpose of familiarizing them with the message of the film.

"When Bobby Goes to School" is a 16-mm. sound film, free from advertising, dealing with the health appraisal of the school child, and may be borrowed without charge or obligation on application to the distributor, Mead Johnson & Company, Evansville, Indiana.

Ohio Health Officials Meet

Speakers at the annual convention of the Ohio Federation of Public Health Officials held in Columbus, May 23, included: Dr. H. S. Mustard, director, DeLamar Institute of Public Health, Columbia University, New York, who discussed "Public Health Problems in National Defense"; Dr. J. F. Bateman, superintendent, Columbus State Hospital, whose subject was "Mental Health", and Dr. James M. Ruegsegger, instructor in medicine, University of Cincinnati College of Medicine, who spoke on "Modern Treatment of Pneumonia".

Officers of the Federation for 1941-1942 are: President, Dr. P. L. Harris, Ravenna, Portage County health commissioner; president-elect, Dr. Roy C. Rehder, Mansfield, Richland County health commissioner; secretary, Dr. W. D. Bishop, Greenville, Darke County health commissioner; delegate to the American Public Health Association, Leo F. Ey, acting chief, State Department of Health Laboratories; alternate, Dr. Walter H. Hartung, Toledo, former State Director of Health.

Cincinnati—In recognition of his 25 years of service on the staff of St. Mary Hospital, Dr. Frank U. Swing was guest of honor at a dinner in the hospital. The Sisters of the Poor of St. Francis arranged the affair.

Toledo—Dr. Maurice A. Schnitker has been elected president of the recently organized American Federation for Clinical Research.

Springfield—Speakers on a refresher course at City Hospital, sponsored by District No. 11 of the Ohio State Nurses' Association, included: Dr. Frank W. Anzinger, Jr., Dr. J. A. Link and Dr. A. A. Gavey.

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*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

A business session opened the meeting of the Adams County Medical Society held at Manchester, Wednesday morning and afternoon, June 18. Dr. Sam Clark, Cherry Fork, reported as legislative committeeman and Dr. S. J. Ellison, West Union, delegate to the Ohio State Medical Association, gave a report on the Cleveland meeting.

Dr. J. E. Pirrung completed the morning program with an address on "Aspects of Ulcer and Cancer of the Stomach", discussed by Dr. W. L. Faul, Sr., Russellville. Following an address by Dr. Edward S. Jones, Erie, Pa., a talk on "Diagnosis and Medical Treatment of Ulcer of the Stomach", was made by Dr. Elmer A. Schlueter, Cincinnati, discussed by Dr. R. C. Wenrick, Winchester. Dr. R. L. Lawwill, Seaman, then reported as county health commissioner.—O. T. Sproull, M.D., secretary.

HIGHLAND

The Woman's Auxiliary to the Highland County Medical Society held their regular luncheon meeting at the Highland House, Hillsboro, June 11. Mrs. W. B. Roads, who was a delegate to both the State and National conventions at Cleveland, gave a report on the programs and entertainment.—Mrs. W. B. Roads, secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CLARK

Dr. D. S. Cowles, Ostrander, gave an illustrated address on "Fever Therapy", at a meeting of the Clark County Medical Society, Thursday noon, May 8, at the Hotel Shawnee, Springfield.—News clipping.

GREENE

An interesting paper on "Treatment of Fractures of the Neck of the Femur", was presented by Dr. James C. Walker, Dayton, at a meeting of the Greene County Medical Society, June 12, at Xenia. Dr. Ben R. McClellan reviewed a few of the high points of the A.M.A. meeting in Cleveland.—Donald F. Kyle, M.D., secretary.

MONTGOMERY

Major John H. Fite, chief of technical data branch, of the U. S. Army Air Corps at Wright Field, gave a short talk and showed sound movies of the Air Corps at the Annual Meeting of the Montgomery County Medical Society, Wednesday afternoon and evening, May 28, at the Dayton Country Club. Entertainment began in the afternoon with a golf tournament, putting contest, quoits, bridge, etc.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

CRAWFORD

The first joint meeting of the Crawford County Medical Society and the Woman's Auxiliary was held at the Harding Hotel, Marion, Wednesday evening, May 14, with 35 physicians and their wives present. The guest speaker was Dr. John H. Lazzari, Cleveland, who discussed "The History of Cancer".—News clipping.

MARION

Dr. R. W. Kissane, Columbus, spoke on "Cardiac Contusion", at a meeting of the Marion Academy of Medicine, Tuesday, June 3, at the Marion City Hospital.—News clipping.

SENECA

"Care of Crippled Children", was the subject discussed by Dr. Burt Chollet, Toledo, at a meeting of the Seneca County Medical Society, Wednesday, June 18, at the Fostoria Country Club.—N. E. Williard, M.D., secretary.

Fourth District

(COUNCILOR: A. A. BRINDLEY, M.D., TOLEDO)

HENRY

Dr. Earl W. Huffer, Toledo, spoke on "Bladder Diseases in General Practice", at a dinner meeting of the Henry County Medical Society, Tuesday, June 10, at Napoleon.—News clipping.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

PORTAGE

"The Hysterias", was the subject discussed by Dr. E. O. Harper, Cleveland, at a meeting of the

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Portage County Medical Society, Thursday evening, June 19, at Robinson Memorial Hospital, Ravenna.—Emily J. Widdecombe, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

LAWRENCE

Plans for the physical examination of NYA enrollees were discussed at a meeting of the Lawrence County Medical Society, Tuesday, June 6, at Ironton. The society also considered a method for the collection of fees from political subdivisions for professional services to the medically indigent.—Wm. A. French, M.D., secretary.

SCIOTO

A musical program was presented at a luncheon meeting of the Woman's Auxiliary to the Hempstead Academy of Medicine, Wednesday, May 14, at the Hurth Hotel, Portsmouth.—News clipping.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

Dr. Jonathan Forman, editor of *The Ohio State Medical Journal*, spoke on "Progress of Auxiliaries", at a meeting of the Woman's Auxiliary to the Columbus Academy of Medicine, Monday evening, May 19, at the Columbus Gallery of Fine Arts.—News clipping.

MADISON

"Management and Treatment of the Menopause", was the topic discussed by Dr. Tom F. Lewis, Columbus, at a meeting of the Madison County Medical Society, May 22, at the home of Dr. G. C. Scheetz, West Jefferson.—H. D. Wright, M.D., secretary.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

ASHLAND

Dr. T. A. Willis, Cleveland, spoke on "Treatment of Compound Fractures", at a meeting of the Ashland County Medical Society, Friday evening, May 9, at the Ashland Country Club.—News clipping.

WAYNE

Charles S. Nelson, Executive Secretary of the Ohio State Medical Association, was guest speaker at a meeting of the Wayne County Medical Society, at Wooster, Friday evening, May 23. He discussed some of the activities of the State Association, including its legislative program.

RICHLAND

The Annual Jamboree of the Richland County Medical Society was held at the Shelby Country Club, Thursday, June 26.—Geo. L. Evans, M.D., secretary.

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GYNECOLOGY—Two Weeks Intensive Course starting October 20th. One Month Personal Course starting August 25th. Clinical Course every week.
OBSTETRICS—Three Weeks Personal Course starting August 4th. Two Weeks Intensive Course starting October 6th. Informal Course every week.
OTOLARYNGOLOGY—Two Weeks Intensive Course starting September 8th. Informal Course every week.
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Do You Know - - -

During the period of January 1 to May 27, 1941, the State of Ohio paid $501,323.67 to charitable institutions for the redemption of sales tax coupons at 3 per cent of their face value. For a similar period in 1940, the amount was $399,280.20. General sales tax collections for the same period were: For 1941, $22,114,856.20; for comparable 1940 period, $17,896,558.39. These figures represent a 23 per cent increase in redemptions and a 23 per cent increase in collections.

* * *

Among the 28,139 students admitted to the University of Wisconsin between 1931 and 1939 who were given complete physical examinations there were 289 with heart disease. The sex ratio was 1.7 females to 1 male.

* * *

Dr. John Rosslyn Earp, medical editor of the division of public health education of the New York State Department of Health, who was director of the health department of Antioch College, Yellow Springs, from 1923 to 1927, died May 19. He was 49 years old.

* * *

A report on the first full year of operation of Indiana's premarital blood test law showed that positive results were obtained in tests for syphilis in 1.6 per cent of marriage license applicants. Of 64,913 tests, 1,098 showed positive syphilis reactions.

* * *

Ohio's poor relief load was 56,600 in May, the lowest since 1933—according to preliminary reports of State Welfare Director Charles L. Sherwood.

* * *

Neither the State Department of Health nor the district health boards are vested with the authority to enforce state health laws and regulations upon property acquired in this state by the United States Government under Article I, Section 8, of the Constitution of the United States, Attorney General Thomas J. Herbert has ruled (Opinion No. 3704), in response to an inquiry from Dr. R. H. Markwith, State Director of Health.

* * *

Dr. Robin C. Buerki, medical superintendent of the State of Wisconsin General Hospital, Madison, and former president of the American Hospital Association and of the American College of Hospital Administrators, has been appointed dean of the University of Pennsylvania Graduate School of Medicine, and director of hospitals of the University of Pennsylvania—a newly created post. George H. Meeker, Ph.D., who has been dean since 1919, will retire October 1.

Dr. Jonathan Forman, Columbus, has been elected an honorary member of the Society for the Study of Allergy, of Argentine, South America.

* * *

Plans are under way for the construction of a $150,000 medical research laboratory building for Toledo Hospital, of which Dr. Bernard A. Steinberg is director of research.

* * *

A postgraduate course in certain forms of heart disease will be given by the University of Cincinnati College of Medicine and the Heart Council of Cincinnati, September 8-20, at the Cincinnati General Hospital.

* * *

New officers of the Homeopathic Medical Society of Ohio are: Dr. F. R. Stansbury, Cincinnati, president; Dr. M. P. Thomas, Cleveland, president-elect; Dr. H. S. Neiswander, Pandora, vice-president; Dr. Charles E. Geiser, Cincinnati, secretary; Dr. George H. Irvin, Norwalk, treasurer.

* * *

Dr. J. S. Rambo, Richwood, and Dr. A. Rhu, Marion, were recently presented with 50-year jewels, emblematic of 50 years of membership in the Masonic Order.

* * *

Among the exhibits at the Cleveland Health Museum are plaster casts taken from the hands of Dr. George W. Crile, the late Dr. Harvey Cushing and the late Dr. Charles H. Mayo.

* * *

A round-table discussion on "Vitamins" was conducted recently over the Marion radio station WMRN, with the following participating: Dr. J. F. Holtzmuller, Hardin County health commissioner; Dr. S. M. Seifert, Marion County health commissioner, and Dr. G. Frederick Moench, health commissioner of Delaware and Union counties.

* * *

New officers of the Ohio State Eclectic Medical Association are: Dr. D. J. King, Findlay, president; Dr. G. W. DeMuth, Sherwood, president-elect; Dr. J. F. Conrad, Magnetic Springs, vice-president; Dr. M. B. Rice, Pandora, secretary; Dr. F. L. Thomas, Marion, treasurer.

* * *

Dr. Charles A. Wilzbach, health commissioner of Cincinnati, has been elected chairman of the Ohio Valley Conference of Food, Drug and Health Officials.

* * *

The 1942 Annual Meeting of the American Association of Industrial Physicians and Surgeons will be held in Cincinnati, the Association decided at its recent meeting in Pittsburgh.

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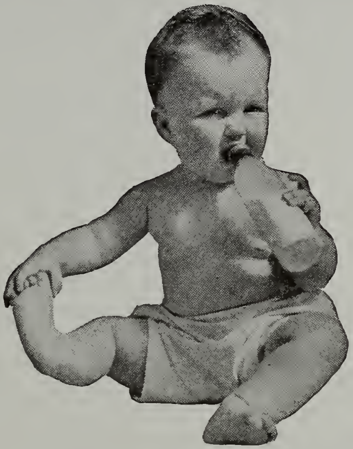

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News Notes

Ashtabula—Dr. H. A. Tagett has been appointed city health commissioner to serve during the absence of Dr. James H. Park, now on active duty as a lieutenant in the Medical Corps of the U. S. Army at Ft. Benjamin Harrison, Ind.

Cleveland—Dr. Malcolm Eveleth, assistant in pathology at Western Reserve University School of Medicine, will become a member of the medical faculty at Yale University in July.

Columbus—Dr. Jonathan Forman spoke on "Medical Care for Persons of Limited Incomes", at a meeting of the Kiwanis Club of Northern Columbus.

Dayton—Fifty local physicians volunteered to serve as medical examiners in the annual preschool health check-up sponsored by the local P.T.A., medical and dental societies and the department of health.

East Liverpool—Dr. Charles A. Gerace has been named city health commissioner succeeding Dr. F. R. Harrison called to active duty at Ft. Bragg, N. C., as a lieutenant in the Medical Corps of the U. S. Army.

Fostoria—Dr. J. L. Murphy explained the recently enacted enabling act for medical service plans at a meeting of the Rotary Club.

Logan—Dr. A. K. Smith has resumed practice after an absence from his office of over six months following an automobile accident.

Portsmouth—Dr. C. W. Wendelken has been appointed to act as health commissioner during the absence of Dr. A. L. Berndt, who is on active duty in the Medical Corps of the U. S. Army at Ft. Knox, Ky.

Rio Grande—Dr. M. H. Mitchell is the new president of the Gallia County board of health.

Sidney—Dr. Harry Wain, local health commissioner, was guest speaker at a recent junior high school assembly.

Wauseon—Dr. Verne A. Dodd, professor of surgery, Ohio State University College of Medicine, spoke on "Differential Diagnosis of the Acute Abdomen", and conducted a special clinic at Detwiler Memorial Hospital on May 23.

Wellsville—Dr. J. V. Rice has been re-elected city health commissioner.

Oxford—Dr. C. I. Stafford spoke on "Evaluation of Catarrhal Vaccine Orally", at a meeting of the Union District Medical Society, April 24, at the City Library, Rushville, Indiana.

LaRue—A farewell party was given for Dr. Jesse R. Johnson by the local Business Men's Association. He is leaving to become medical director at the Lewiston, Pa., plant of the American Viscose Corporation.

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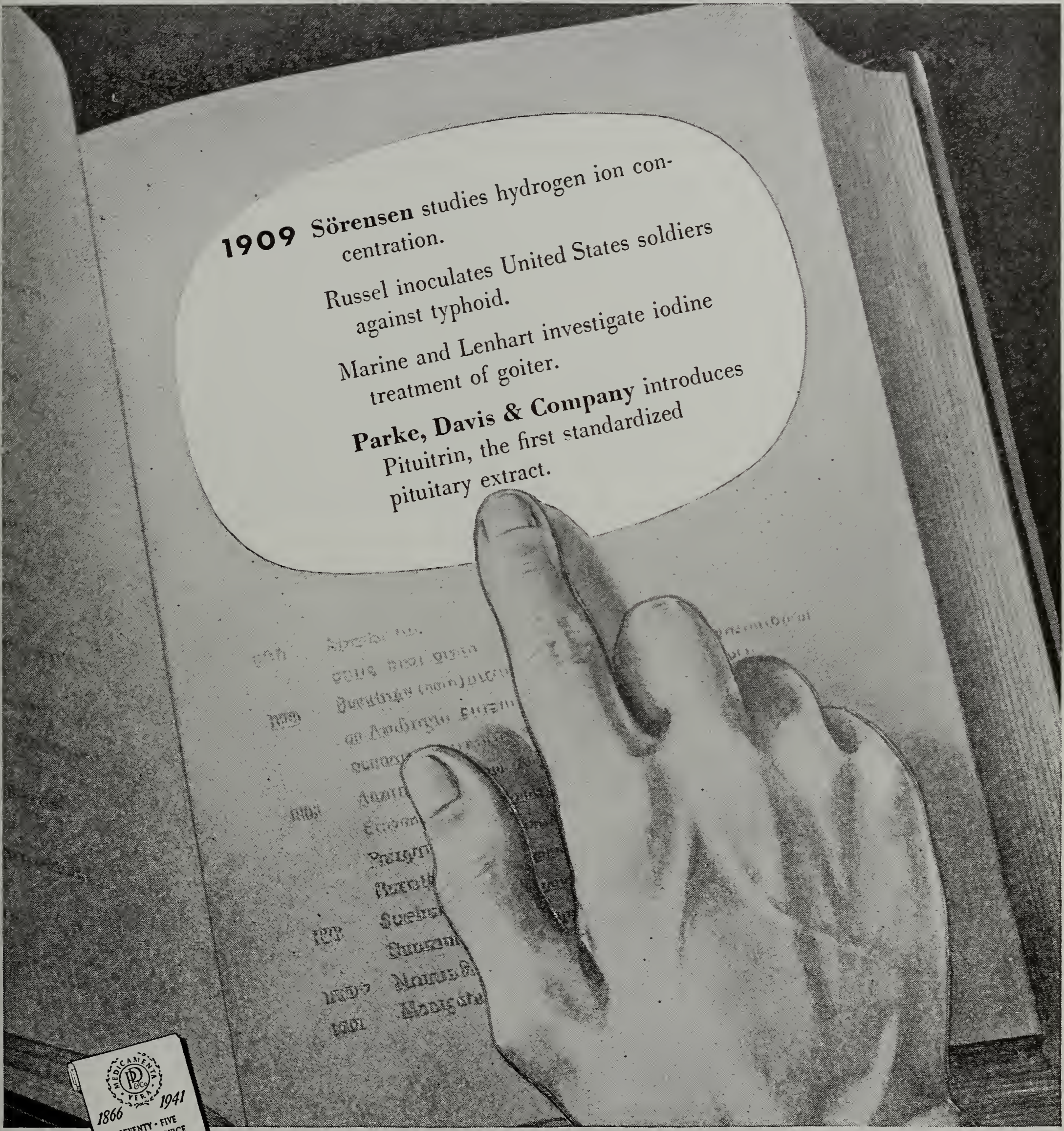

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The Physician's Bookshelf

"**Why Is the World Sick?**" by Paul K. Lipps, M.D. ($1.50. *Christopher Publishing House, Boston),* presents the author's concise answer to the question, "that sickness is caused primarily and basically by one common underlying condition: The presence, the work, and the poison of certain parasites within the body". These parasites of which the author writes are simply the pinworm, the roundworm, the tapeworm, and the whipworm. Very simple!

"**Proctology**", by Frederick C. Smith, M.D. (Second edition. *F. A. Davis Company, Philadelphia),* appears within less than two years of the first edition. This speaks for the need of such a book and the worth of this one. Initial illustrations and several new subjects have been introduced.

"**Introduction to Psycho-Biology and Psychiatry**", by Esther Long Richards, M. D. ($2.50. *C. V. Mosby Company, St. Louis),* represents a successful attempt on the part of her who is psychiatrist-in-chief to the Baltimore City Hospitals to put into writing 22 years of effort directed towards giving the undergraduate nurses some idea of the need for understanding human behavior in its relationship to the practice of their profession.

"**How to Prevent Goiter**", by Israel Bram, M.D. ($2.00. *E. P. Dutton, New York City),* makes of the six million suffering from goiter, a major problem. This book sets forth the simple rules of the physical and mental conduct which will help to prevent goiter. It is not a medical book but attempts to remove fear.

"**Science and Seizures**". New Light on Epilepsy and Migraine, by William G. Lemmox, M.D. ($2.00. *Harper and Brothers, New York City),* sets forth in an excellent way not only what will profit the general public to whom it is addressed but also the average physician who is familiar only with the more evident forms. It is a history and a guide which every one of us should read.

"**Hygiene of Marriage**". A Detail Consideration of Sex and Marriage, by Millard Spencer Everette, M.D., forewarded by Clara M. Davis and introduced by T. V. Smith ($0.49. *World Syndicate Publishing Company, Cleveland),* this is a reprint of a book which appeared a few years ago and it has stood the test of time as an excellent manual. At this remarkable price this reprint certainly is available for all.

"**Marriage and Parenthood**", by Garry C. Myers, Ph.D. ($0.49. *World Syndicate Publishing Company, Cleveland),* this is by the well-known authority on parentage of the Western Reserve University and makes a psychological analysis of fundamentals of human relationships.

"**The Avitaminoses**", by Walter H. Eddy, Ph.D., and Gilbert Dalldorf, M.D. ($1.50, Second edition. *Williams and Wilkins, Baltimore),* correlates in a dependable manner clinical observations, pathological examinations, and dietary experiments. Significant material is selected from the literature, the work therefore becomes obligatory reading for all who have any interest in the problems of nutrition.

"**A Diabetic Manual**". For The Mutual Use of Doctor and Patient, by Elliott P. Joslin, M.D. ($2.00, 7th edition. *Lea Febiger, Philadelphia),* needs no introduction but the mere announcement of its appearance. This edition contains

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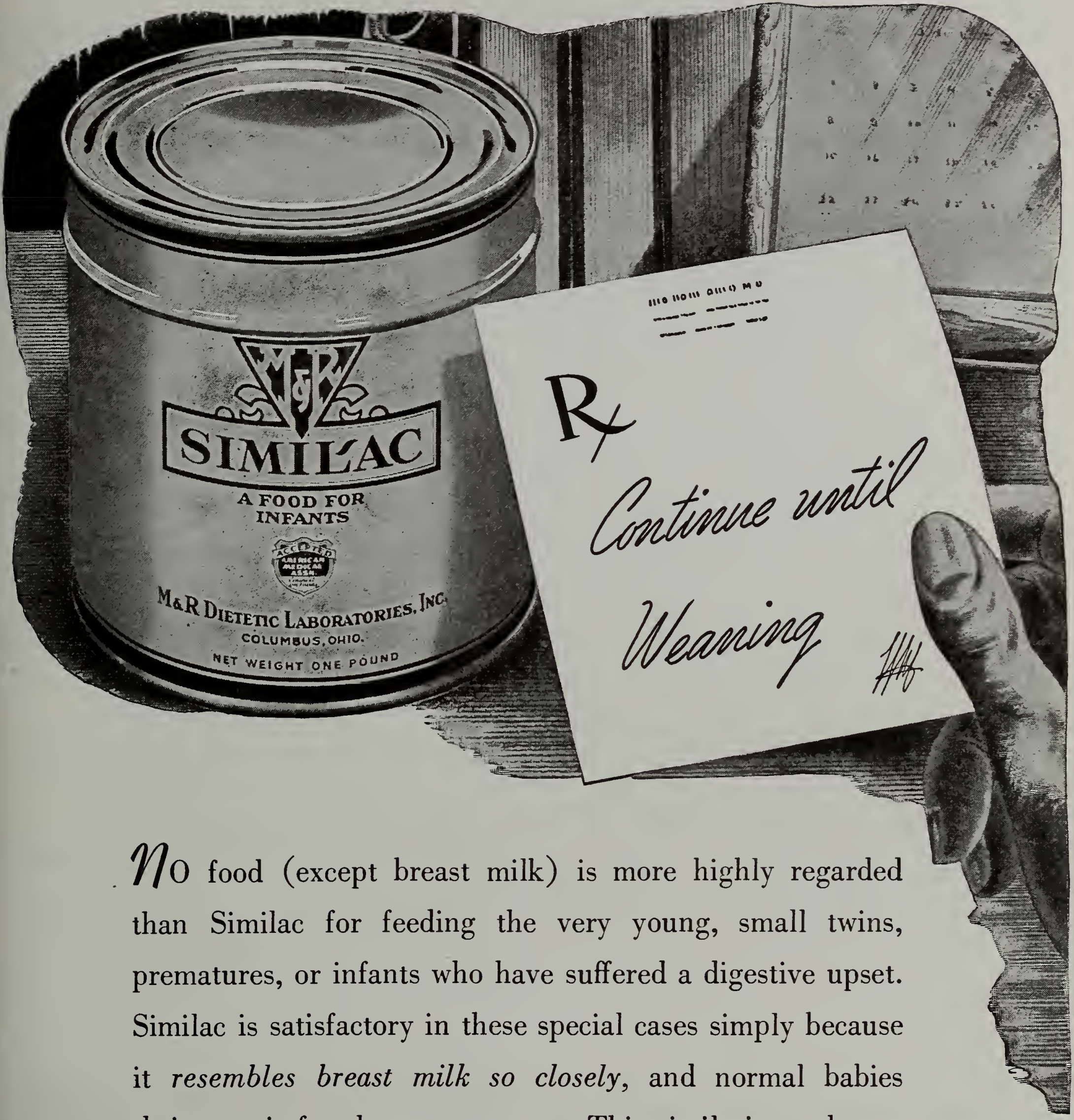
Frequently, the Headquarters Office receives inquiries from physicians seeking assistants, partners, or men qualified for positions on private hospital staffs.

If physicians seeking new opportunities or desiring to change locations will file their names with that office, an effort will be made to furnish them with suggestions and at the same time render a service to members seeking assistants, etc.



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"The Neuroses in War", by ten distinguished British authors under the editorship of Emanuel Miller ($2.50. *MacMillan Company, New York City)*, its worth in England proved, makes important reading for all of us who are concerned with the nervous responses of people in war.

"The Doctor Takes a Holiday". An Autobiographical Fragment, by Mary McKibben-Harper, M.D. ($2.50. *Torch Press, Cedar Rapids, Iowa)*, is essentially a story of travel in the Orient by this brilliant woman physician. It therefore tells us of just the things we would like to know. The stay-at-home physician can get a delightful vacation some rainy night by taking the telephone receiver off and going east with this most entertaining guide.

"Pye's Surgical Handicraft". A Manual of Surgical Manipulations, Minor Surgery, and Other Matters Connected With the Work of House Surgeons and of Surgical Dressers. Edited by Hamilton Bailey of the Royal Northern Hospital, London ($6.00, *William Wood Book Company, Baltimore)*, it first appeared in 1884 and has been revised at frequent intervals since. This the 12th edition continues to supply in an accessible form the practical information required by those for whom it was written.

"McGillicudy: Agent", by Julia B. McGillicudy ($3.00. *Stanford University Press, Santa Clara, California)*, has for its hero no ordinary manner of man. First a doctor in the Indian wars, later head of the largest Indian agency in the country where he handled 9,000 war-like Sioux without the aid of United States troops. It is an epic of frontier life told with vividness though we are assured without deviation from the facts.

"What Price Alcohol?" by Robert S. Carroll, M.D. ($3.00. *MacMillan Company, New York City)*, is a practical and unbiased discussion of the effects, causes, and treatment of alcoholism. The author is known to most of us through his clinical work at Highland Hospital in Asheville and his several books dealing with the nervous patient. With a great increase in rejections by insurance companies in the last decade on the

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"What Are the Vitamins?" by Walter H. Eddy, Ph.D. ($2.50. *Reinhold Publishing Company, New York City)*, presents pertinent and reliable information condensed by an authority.

"America Organizes Medicine", by Michael M. Davis ($3.00. *Harper and Brothers, New York City)*, brings the viewpoints of this well-known author up to date. The editor of the new quarterly, "Medical Care", here attempts to consolidate his objectives.

"Aids to Anatomy", by Edward P. Stibbe ($1.50, first edition. *Williams and Wilkins, Baltimore)*, is one of the well-known "Students' Aid Series". This is one of the most successful of pocket anatomies. Its new features are: the provision of a number of line diagrams that illustrate, replacement of code letters by full words, readjustment of type, and the introduction of a few new clinical illustrations.

"Wolf Child and Human Child", by Arnold L. Gessell, M.D. ($2.00. *Harpers, New York City)*, is an absorbing study of heredity and environment by the famous authority on child development, and is based on a diary account of a child who was reared by a wolf and then lived for nine years in the orphanage of Midnapore, Province of Bengal, India.

"Toughen Up, America!" by Victor G. Heiser ($2.00. *Whittlesey House, McGraw-Hill Book Company, Incorporated, New York City)*, is a book of the utmost importance at this time by the author of "*American Doctor's Odyssey*" and "*You're the Doctor*". It deals with the application of some personal hygiene in terms of national defense. It shows how the German people are actually better fed than we Americans. It certainly ought to wake up America.

"That None Should Die". An American Novel by Frank G. Slaughter ($2.75. *Doubleday, Doran and Company, Incorporated, New York City)*, is a story of courage of man and the problems he faced. There are in the first half the problems of interne, resident, lover, nurse, mistress, attempts to get started in practice of surgery. The second half deals with the assumption of control by the

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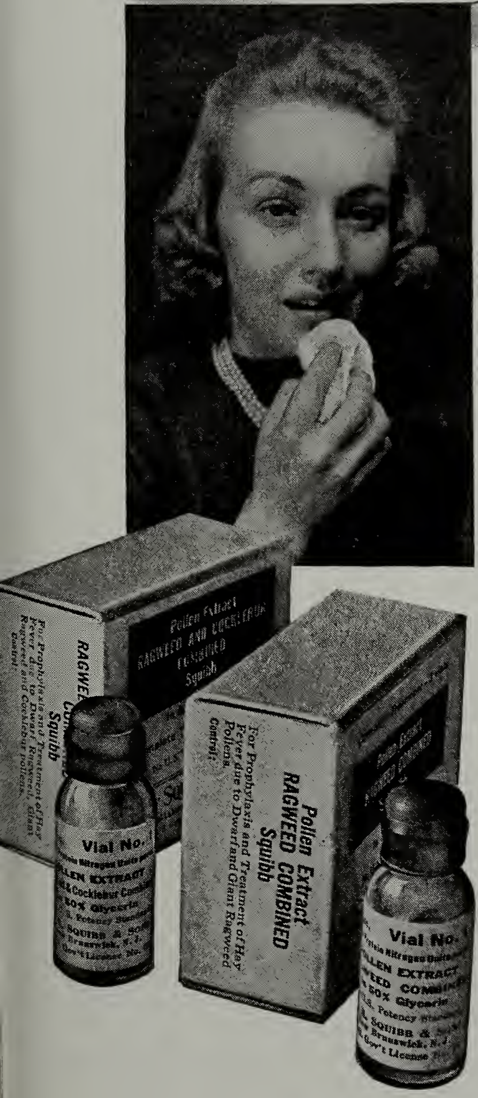

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[1] Cooke, R. A., and Stull, A.: *J. Allergy* 4: 87, 1933.

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Federal Government of all hospitals and physicians. The first is a well-written indictment of modern society and its medicine. Perhaps it may be characterized as another "Citadel transferred to American soil". The last section tells a very dramatic story of how a dope ring could fasten its tentacles on the whole profession and country. It is a very dramatic story which I hope may be made into a "movie".

"The Essentials of Applied Laboratory Technique", by J. M. Feder, M.D., Anderson, South Carolina (*Charlotte Medical Press, Charlotte, North Carolina)*, gives an excellent detail of how to build and conduct an office or small hospital laboratory at little cost. This is about the most practical laboratory manual for physician's office which I have seen. The book is well illustrated and has also an excellent chapter on blood and plasma transfusion by John Elliott.

"Food Guide". To Glorious Health With Over 800 Recipes, by Eugene A. Bergholz, M.D. ($2.50. *Schmidt Publishing House, Milwaukee, Wisconsin)*, is a combined cook-book and exposition of a theory of health and its attainment of "Natural Therapy". Such books always appeal to your reviewer because they present excellent recipes and suggestions for making plain foods attractive, even if we cannot accept the explanation of disease.

"Doctor Jad". The Way of Life of a Physician, by Victor Robinson, M.D. ($0.96. *Row, Peterson and Company, Evanston, Illinois)*, is one of a series of books of the way of life under the direction of a professor from the University of Texas and it tells about the medical student, interne, young practicing physician, the busy day in his office and clinic which comes later, by means of beautiful illustrations and dramatic sketches by one of the masters of writing among the American physicians. I would urge that a copy be given to every youngster who is trying to decide "What He Wants To Be", and that you improve public relations for the rest of us by having a copy on your waiting-room table.

"Your Career in Nursing", by Cecelia L. Schultz, R.N. ($2.00. *Whittlesey House, McGraw-Hill Book Company, New York City)*, is one of those unusual things—a readable and truly informative career book by the author of "How to Enjoy Ill Health".

"Physical Medicine", by Frank H. Krusen, M.D. ($10.00, 351 illustrations. *Saunders, Philadelphia)*, discusses the uses of physical diagnoses and treatment. Here we have in one volume of about 850 pages an outline in a conservative manner of the whole subject. The author is head of physical therapy at the Mayo Clinic and the book belongs on the desk of every physician and of every hospital.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 August, 1941 No. 8

JONATHAN FORMAN, M.D., *Editor*

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Diet, Health and Defense

C. A. ELVEHJEM, Ph. D.

I WAS glad to find that my talk this evening was given a multiple title, for my knowledge of the three individual subjects, diet, health and defense varies considerably. Since I know more about diet than I do about health and defense, I will start with a discussion of this more tangible subject. There are, of course, many reasons for the present increased interest in nutrition, but this interest would be of little value were it not for the available information concerning the chemistry of our diet. It is difficult to designate the first application of chemistry to nutrition, but it was undoubtedly related to the production of food. Thus we have seen, at least in many countries, the production of an ample supply of food and at certain times an excess of food commodities. However, the modern biochemist has demonstrated that a full stomach does not necessarily insure adequate nutrition. The presence or absence of the minutest essential nutrient determines the efficiency of the vast bulk of our diet. As early as the time of Hippocrates there existed a belief in the occurrence of a single universal nutrient. There were many kinds of food but they all supplied the same nutrient. Our ideas have changed considerably since that time. In fact the entire evolution of nutritional studies is based upon the multiplication of the number of essential nutrients. It is almost unbelievable that the idea of a single nutrient was in existence as late as 100 years ago. A few chemical analyses were made on food 150 years ago but no great progress was made until 1864 when Henneberg elaborated the method of proximate analysis, which is still in use today. The greatest recording of proximate analyses of American food materials was made by Atwater in U.S.D.A. bulletin 28, which contained 2,600 analyses. Even these analytical data did not necessarily represent the true nutritional value of foods. Only a few men had vision enough to question the orthodox methods of measuring food values.

The Author

● Dr. Elvehjem, Madison, Wisconsin; member American Chemical Society, American Society Biological Chemistry, American Institute of Nutrition; professor of biochemistry, University of Wisconsin.

As early as 1881 Voit suggested the importance of feeding pure chemical compounds in experimental studies. We are approaching this goal today, 60 years later. With the realization of the necessity of using new methods of approach animal studies were started in several parts of the world; Hopkins in England and Osborne and Mendel in the United States used rats; Eijkman in Java used chickens; and Babcock and Hart in this country used young calves. At first progress was extremely slow, much like the progress we make when we start putting a jig-saw puzzle together. However, after a few pieces were matched, progress was more rapid and the final picture is now beginning to take form.

Many of the early workers found that it was necessary to learn more about minerals and vitamins before the protein component of our diets could be studied intelligently. In the meantime, chemists continued identifying and preparing the individual amino acids. When Rose of

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Delivered before the Ohio Conference on Nutrition in Defense at Columbus, June 17, 1941.

Illinois carried out his studies on the nutritive value of amino acids somewhat over 10 years ago, studies which have placed protein nutrition on a purely scientific basis, all the amino acids were available except one. The lack of information about this amino acid, threonine, had complicated studies for many years.

It is impossible to review the details of work on mineral elements, but I imagine the observations which come closest to most of us in a practical way are those that have shown the value of simple mineral salts in the human diet. Thus we need no longer depend upon blood or expensive hemoglobin preparations for the treatment of anemia. Simple iron salts will satisfy any additional iron demands; in fact, the iron in these simple salts is much more available than in the complex forms of iron. The same is true for all other mineral elements except sulfur.

The first of the vitamins to be given serious chemical consideration was undoubtedly vitamin D. Steenbock and Black, and Hess and coworkers showed in 1925 that the crude cholesterol could be activated by ultra-violet light. It was not long before the complete structure of the sterols was elucidated and now a number of forms of vitamin D have been described.

The next vitamin to succumb to chemical attack was vitamin A. Although it has been suggested in 1919 that carotene was closely associated with vitamin A activity, the complete confirmation did not come until 10 years later when Euler and Moore independently demonstrated the activity of carotene.

THE VITAMINS AVAILABLE IN SYNTHETIC FORM

Vitamin C was actually isolated in 1927, but it was five years before anyone realized that the compound that had been isolated had vitamin C activity. In 1932 sufficient vitamin C was isolated to establish its constitution and develop commercial methods of synthesis. This was the very first vitamin to become available in synthetic form.

The first member of the vitamin B complex, the anti-beriberi factor, was isolated in 1926 by Jansen and Donath. Eight years later Williams published an improved method for the isolation of this vitamin and soon offered a chemical structure for it. As you all know synthetic vitamin B_1 or thiamin is now available on a commercial basis at less than $1.00 per gram. During the past five years we have seen the isolation, identification and synthesis of riboflavin, nicotinic acid, vitamin B_6, pantothenic acid and choline. We might tell an interesting story concerning the chemical work on each of these compounds but for our purpose this evening it is only necessary to mention that all these B vitamins are available on a commercial basis.

In addition to the above group we may add that two other fat-soluble vitamins, vitamin E and vitamin K are also available in synthetic form. It is most gratifying that our chemical industries, even at a time like the present, are taking almost as much interest in the manufacture of vitamins as they are taking on the production of dyes and explosives. Thus powerful tools, synthetic vitamins, salt mixtures, sugar solutions and even animal acids have been put into our hands. The real significance of these studies has become even more evident during the past year. Rats have been grown to maturity and second and third generations have been produced on a mixture of casein, sucrose, corn oil, salt mixtures, vitamins A, D, E, K, thiamin, riboflavin, nicotinic acid, pyridoxine, pantothenic acid and choline. Dogs have been maintained on such diets for several months but this does not mean that all factors have been identified. Most of this information has become available within the past 10 years and it is not surprising that many mistakes have been made in attempting to apply these tools in a program involving improved health.

HEALTH

Now let us turn to the second subject, health. How has this increased knowledge of the chemistry of our diet helped in improving health, and what can we expect this knowledge to do in the future? We must realize that many of the facts which I have listed were not put to immediate use. To be sure the relation of dietary deficiencies to specific diseases such as rickets, scurvy and pellagra was beginning to be accepted about 1910, and pictures of humans suffering from these deficiency diseases found their way into our textbooks. However, most of these pictures were of humans living in either the Orient or certain European countries. Most people felt that it was impossible to have severe nutritional deficiencies in the United States where we had plenty of food.

In the meantime we saw the incidence of diseases such as rickets and pellagra increase greatly in this country. A few workers were concerned about this situation, but there was no general interest in improving nutrition in order to prevent the incidence of these diseases. Twenty years ago cod liver oil was still unrecognized as specific for the prevention of rickets. As late as 1925 there was great controversy over the value of simple iron salts and complex organic mixtures in the treatment of anemia. Let us follow the picture in the case of pellagra a little more closely. The Public Health Service was sufficiently concerned over the incidence of pellagra in the southern states to appoint several workers to study the problem. As you know Dr. Goldberger gave his life in order to demonstrate that pellagra was a nutritional deficiency rather than a disease of infectious nature. In spite of his great efforts, there was no general agreement that pellagra could be eliminated from this country through improved nutrition.

Medical workers were not convinced that pellagra could be treated through diet. Their point of view should not be criticized too severely because no one had been able to cure any number of severe pellagrins through simple dietary means. Even yeast was not rich enough in nicotinic acid to produce dramatic cures of this syndrome. It remained for Dr. Spies to prove that diet would do the trick and he did it the hard way before the synthetic vitamins were available but only by the most careful supervision of each patient. Today with the availability of synthetic vitamins it is easily possible to demonstrate the dramatic effect not only of nicotinic acid in pellagra but of thiamin in polyneuritis and related disorders, riboflavin in cheilosis, vitamin K in hemorrhagic conditions and vitamin A in night blindness.

USE OF SPECIFIC VITAMINS IN SEVERE NUTRITIONAL DEFICIENCIES

In spite of the very significant chemical work that has been done on vitamins during the past decade I still feel that the most important development during the last few years is this demonstration of the cure of severe nutritional deficiencies through the administration of specific vitamins. Responses of this kind are now common experiences in most clinics and medical workers are willing to accept the fundamental importance of vitamin therapy.

A new chapter in the field of medicine is about to be written and let us hope it will be based on the fundamental concepts of nutrition. This direct relationship between vitamins and health has introduced some problems but in general it has allowed further progress. In the first place it has stimulated pharmaceutical companies to manufacture vitamin tablets and capsules in ton lots. We should not overlook the fact that this is a very fortunate situation since these preparations are then available for clinical workers who need the preparations in treatment of specific diseases. However, we have also seen a great deal of hysteria over the use of these preparations through self medication by the public. I feel that this hysteria has not been as serious as one might expect when one considers the possible benefits that the public might relate to the use of these preparations. It will not take us long to settle down to a common sense use of vitamin compounds.

With a greater knowledge of the chemistry of vitamins we have also seen an increase in our knowledge of the exact function of these compounds. In other words, we no longer consider vitamins as having some mysterious effect in the animal body, but we recognize them as specific components of specific enzyme systems. For example, in thiamin deficiency there is a decrease in the cocarboxylase content of the metabolizing tissue; pyruvic acid cannot be metabolized, and therefore accumulates in the tissue. Many serious secondary effects may result from this accumulation but the specific value of thiamin is to build this cocarboxylase. It is, therefore, becoming possible to use some of this knowledge in diagnosing deficiency diseases before the severe external symptoms appear. Thus we are able to treat these deficiencies when treatment is of greatest value.

While we can determine the vitamin C and hemoglobin content of blood and the thiamin and riboflavin excretion in the urine, we still have much to hope for in the case of simple methods for the diagnosis of borderline nutritional diseases. Perhaps the most fruitful approach will be a study of the composition of the diets consumed.

This brings us to the improved methods of determining the vitamin content of foods. Until very recently we had to rely upon animal assays which were costly and time consuming; and which allowed the analyses of only those foods that contained a fairly large amount of the vitamin in question. Again I can perhaps give the best illustration in the case of the antipellagric factor. Many textbooks contain tables showing the nicotinic acid content of foods, but most of these figures are unreliable because the assay generally related to riboflavin rather than nicotinic acid. When nicotinic acid was identified the only method of assay depended upon the use of dogs. Usually it took several months to produce black tongue, at least one month to standardize the response of the dog and another month to make the assay.

NICOTINIC ACID VALUES

After a great deal of effort we were able to obtain nicotinic acid values for a few foods such as meat and yeast that are rich in the factor. However, we were unable to make an assay on wheat to say nothing of patent flour or milk. Chemical methods were of some help but recently a bacteriological method has been developed which we feel is highly satisfactory. We have obtained more values for the distribution of nicotinic acid in foods during the past three months than we obtained in the previous three years. We have determined the distribution of nicotinic acid in the various fractions of the wheat kernel, milk, etc. Similar improved methods have been developed for thiamin, riboflavin and pantothenic acid. The application of these methods is just being made and during the next few years we will see large accumulations of data on the distribution of nutrients in our staple foods.

Industry must cooperate in this work and support studies which will give us the distribution of the nutrients in their specific products. Many industries such as the meat, the cereal, and the fruit industries have been active in this manner during the past few years and others are also taking an interest. I think many of us will be surprised at the amount of data that will be published in the next few months. When we have all this information and when we accept the daily human requirements of each of the factors it becomes a simple problem for the dietitian to put pleasing foods together in order to produce an adequate diet.

DAILY REQUIREMENTS OF VARIOUS NUTRIENTS

Due to the efforts of the Food and Nutrition Committee of the National Research Council, we now have available the daily requirements for a good share of the various nutrients. Theoretically it would be entirely possible for our dietitians to construct adequate diets for all people in this country. However, there are interfering problems such as the cost of food materials, the long-standing eating habits, and limited distribution of foods which stand in our way. Many of these problems can be ironed out in time, but we must recognize that many of these changes cannot be brought about immediately.

Finally then, what are we going to do at this time of national emergency to improve the health of this nation? It is true that at the present time the nutritional requirements of man can be expressed in chemical terms to a greater extent than ever before. However, we must recognize that there is more to adequate nutrition than the mere combining of the known compounds into the diet and the calculation of the cost of these dietary constituents. Due to the fact that some of the vitamins may now be purchased at prices so low that they are difficult for us to comprehend, certain erroneous suggestions have been made concerning the essential costs of the average diet. It is true that one's yearly requirement of thiamin may now be purchased for about 50 cents and the nicotinic acid supply for about 12 cents at wholesale prices.

But we must not forget that the yearly supply of calories is still a significant item in our diet. Most of us ignore calories until times of stress. Even in the last war one of the greatest problems in many countries was an adequate supply of total food. If my calculations are correct I find that it would be difficult to supply one's yearly requirement for energy for much less than $15, and the cost of adequate protein would certainly exceed this value. Thus if we add up the cost of the individual components we get values considerably higher than some of the figures which have recently been suggested by certain workers. It is impossible to even estimate the cost of the unknown factors. I cannot emphasize too strongly the importance of these unknown factors. Some workers feel that we have reached the end when we can grow rats on all synthetic vitamins. All this means to us is that the rat is limited in its value as an experimental animal.

I believe the safest program at this time is to rely upon the common foods which we have been accustomed to eating rather than attempting the production of cheap, synthetic substitutes. We should make every effort to educate the public on the use of the available natural foods. This does not mean that we should not make every effort to improve the quality of the foods which are now making up the American dietary. In other words, we must realize that plant and animal products as produced on the surface of this earth do not necessarily contain the individual nutrients in optimum concentrations for the human being. Professor Drummond has cautioned us about the danger in relying upon what is vaguely called a mixed diet—a diet in which one food is expected to compensate for the inadequacy of another. We must use some ingenuity in compounding natural food materials into a complete diet. Improvement in the quality of certain foods will not only conserve total quantity of food but will tend toward more optimum nutrition of all individuals.

EMPHASIS ON IMPROVED NUTRITION

It is of course amusing that we are starting this emphasis on improved nutrition at a time when food supplies are beginning to be limited. In other words, if we had given greater attention to improved nutrition five years ago when we had a great surplus of many food commodities we could undoubtedly have made greater progress. However, this difficulty merely indicates the inertia in human endeavor and if we did not have this inertia we probably would not have the present world emergency. If certain natural foods are going to be limited and if we must move very rapidly it may become necessary to consider some sort of restoration and fortification of foods. I have already mentioned the value of concentrated preparation in the clinical treatment of deficiencies. However, administration of such concentrated forms of nutrients can only be temporary in nature. If large groups of people are living on combinations of natural foods which do not supply the total requirement, the food supply should be modified or fortified. Fortification of food is not necessarily new. Over 15 years ago salt was fortified with iodine to meet a deficiency of this element in the goiter regions of this country. In general we can see that this program has been quite successful.

About 10 years ago foods fortified with vitamin D were introduced. It is today possible to give definite figures showing the reduction in the incidence of rickets due to this means of adding vitamin D to the diet.

Today one of the immediate problems is the introduction of adequate quantities of the B vitamins in many diets. It is generally recognized that the average diet is low in thiamin and that many of the diets in the southern part of this country are low in nicotinic acid and riboflavin and perhaps also vitamin A and carotene. One might say that it would be easy to eliminate these deficiencies through the reduction in consumption of sugar, through the increased consumption of whole grain cereals, through greater consumption of milk and meat, but I am sure that you all agree that these changes cannot be brought about within the next few months and perhaps not within the next few years.

COMMITTEE ON FOODS AND NUTRITION FAVORS FORTIFICATION PROGRAM

The Committee on Foods and Nutrition has gone on record as favoring the fortification of white flour with thiamin, nicotinic acid and iron. The amount added in each case is sufficient to bring the composition of white flour close to that of the whole wheat grain. This does not mean that the consumption of bread made from this flour or bread made through the use of fortified yeast or concentrates will supply the entire requirement for these elements. The fact is that six slices of fortified bread will at best supply one-fourth of the total daily requirement of these factors. However, the use of this bread will tend to bring diets that are on the borderline of deficiency over to the adequate side. If fortified bread will be used by a large percentage of our people and if the maximum amount of these elements will be placed in the bread used in the southern states, we will see a definite improvement in the health of many people.

Naturally objections have been raised to the fortification program. The most important objection, I will admit, is based on the fact that we should consume whole wheat flour rather than patent flour. However, this objection has already been answered when I stated that we are confronted by an emergency and time is required to change our food habits. The other objection which has been raised is that the introduction of certain nutrients such as thiamin, nicotinic acid and iron into our bread without restoring other nutrients such as other members of the B complex will produce an imbalance in our vitamin intake. There is, of course, no sound reasoning in back of this objection. I wonder why those that have been most active in promoting this objection did not raise their voices when we introduced patent flour into our dietaries. Certainly a greater imbalance was produced by leaving out certain members of the B complex than any imbalance that can be produced by putting certain of these factors back.

It must also be realized that about five-sixths of the thiamin and nicotinic acid in the original wheat kernel is lost during the production of patent flour. These are the vitamins that are being returned in the present program. It is also evident that the diseases resulting from the lack of these two factors are most prevalent in our country today. The other members of the B complex such as vitamin B_6 and pantothenic acid are lost due to a much smaller extent. In fact, less than one-half of these vitamins are removed from the flour during the milling process.

It is also true that up to the present time at least deficiencies of pantothenic acid and vitamin B_6 have not been regularly observed. The cereal grains have never been recognized as an important source of riboflavin and I therefore feel that the fortification of flour with riboflavin is not necessarily significant. However, it is important to add as much riboflavin to many diets as possible, but this can be done through the use of milk solids in the manufacture of the bread. Of course any increase in the consumption of milk and meat will aid greatly in supplying riboflavin. The possibility of adding vitamin A to certain fats is also being considered by many workers. It is of course well known that any increased consumption in milk, cream and butter will add greatly in supplying this factor. Again every effort should be made to supply vitamin A through these sources and through the use of vegetables. However, in case of emergency we should not object too strenuously to the addition of vitamin A materials to vegetable oils.

IMPROVEMENT IN HEALTH THROUGH NUTRITION IS A SLOW PROCESS

In spite of these emergency measures, we must recognize that any improvement in health through nutrition is a slow process. In some cases we may see immediate improvement in health and activity of the individual, but in other cases it may take years and perhaps even a new generation to see the complete results. Some of us have been greatly concerned over the large number of draft rejectees. We must remember that the health of these men is dependent to a very large degree on the kind of diet they consumed 15 to 20 years ago. In some cases their health may be improved merely through the addition of more total food. However, it is impossible to cure flat feet or increase the actual number of teeth. Thus, I cannot help but emphasize that we should not be too enthusiastic about the immediate results that we expect to get. We will hope for the best, but after all if our nutrition program is sound, we will see the greatest effects in the next generation.

In conclusion we may quote the statement made by Mr. McNutt at the National Nutrition Conference for Defense:

> "We are rich; we have vast natural resources; we have the processing machinery, and the marketing techniques. But we still fail to keep up a steady flow of dairy products, meats, fruits, and vegetables from the farms to the tables of

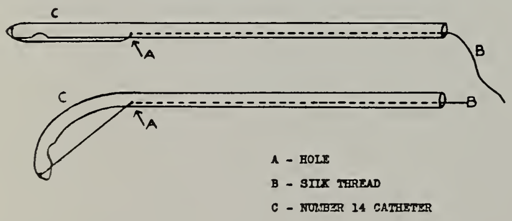
city dwellers. Our American genius for organization and the production fails when it comes to this distribution. We've been saying this for a long time, but we haven't done very much about it. Now that our national existence is at stake we can no longer afford to drift—to muddle along. The easy-going complacency of peace must give way to the hard-bitten realities of defense."

All that I can add to this is a plea for action. We have much fundamental information, the relation between nutrition and health has been demonstrated, we have the supply of natural foods and potential supplies of synthetic vitamins, we have evidence that industry is willing to cooperate in every way and we have leaders who are willing to do their best to head the program in the right direction; why not put our shoulders to the wheel? To be sure we may make minor errors but they cannot begin to do the harm that our lack of interest in the past has produced. As long as we have leaders like Dr. Parran, Dr. Sebrell and Dr. Wilder any slight errors will be rectified immediately. Thus we need have no fear if we go ahead at full speed even though we are not in complete accord with all the details of all parts of the program. The entire nutrition program is scientifically sound and great progress will be made as our nutrition people can think more clearly in the realm of complete nutrition.

Method for Instilling Iodized Oil in the Trachea for X-Rays

J. R. JARVIS, M.D., Van Wert, Ohio

The accompanying illustration is a rough drawing of a method I devised for instilling iodized oil in the trachea for X-rays. An ordinary catheter is used, burning a hole an inch and one-half to two and one-half inches from the end. I then run a silk thread through the catheter and out this hole, and suture it through the tip end. In this way, by pulling the thread, the tip of the catheter is made to bend at any desired angle, and the oil is injected through the catheter either with a syringe or by gravity, with a funnel.



If the hole is placed near the end, the catheter can also be used for direct intubation of either right or left bronchi by merely rotating the catheter before the thread is pulled.

Specific Treatment of Menopause

The specific treatment of menopause consists of substitutional endocrine therapy with the female sex hormone, estrogen, or synthetic non-hormonal estrogenic substance, such as stilbesterol. The natural estrogens are estrone, the excreted form of estrogen which has been isolated in pure form from human pregnancy urine. Estriol is a weak natural estrogen, extracted from placenta, and has a limited sphere of usefulness. Another substance, estradiol, chemically different from the two former substances, has also been isolated from placental tissue and pregnant mare's urine. It is the estrogen found in the graafian follicle and corpus luteum, and is the most potent natural estrogenic substance known. A new synthetic product, known as stilbesterol, has been synthetized by Dodds of London. This drug is many times more active than the natural estrogens, but has the disadvantage of being toxic. In comparison with estrone, Chen has found it to be eleven times more potent when given by the oral method, and twenty-five times more potent when given intramuscularly.

For the usual case of the menopausal syndrome, from 20,000 to 50,000 international units of a standardized estrogen should be given during the first week of treatment, and weekly doses of 10,000 units should be given until the patient has received at least 100,000 units. It is doubtful that smaller doses than this are effective. When an estrogenic substance or pure estrone is given by the oral method, usually 1,000 to 2,000 units should be given daily. Unfortunately we do not have a single accepted standard of unit potency. The maximum dose of stilbesterol that can be given without toxic results is one mg. per day. There is no doubt that the oral method of administration of estrogens is effective.

There has been some concern expressed as to whether or not large amounts of estrogenic substance may be a causative factor in cancer. Recently Geist & Salmon have given over 1,000,000 units in the course of a month to each of a number of patients, and have found no proliferative changes in the endometrium suggestive of malignancy. Until we have more information on this subject, however, we should hesitate before giving large doses of estrogen to patients who have, or are thought to be cured of malignant disease of the pelvic organs or breasts.

The hormone treatment of hemorrhage of endocrine origin at the time of the menopause consists of thyroid, progesterone, and probably the most effective, testosterone. If these hormones do not control the condition promptly, the patient should be given radiation therapy, which is permanently effective in nearly all cases.—David A. Bickel, M.D., South Bend; Jour. Ind. S. Med. Assn., Vol. 34, No. 6, June, 1941.

Previous Uterine Infection as a Predisposing Cause for Spontaneous Rupture of the Uterus

JOHN G. FLEMING, M.D.

SPONTANEOUS rupture of the uterus is a dreaded but fortunately rare complication of late pregnancy and of labor. Excluding dystocia resulting from disproportion and malpresentations, and the injudicious use of pituitrin during labor, spontaneous rupture is due to an inherent or acquired defect in the uterine wall. The condition most frequently encountered is that of previous cesarean section.[1] Other operations which may result in a weakened area predisposing to spontaneous rupture are myomectomy, excision of uterine cornu, and perforation during curettage or illegal abortion.

Most of the current obstetrical texts mention the possibility of degenerative processes of the myometrium predisposing to spontaneous rupture of the uterus in subsequent pregnancies.[2] Such degenerative processes may result from old pelvic inflammations or from puerperal infection following previous parturitions.[3] The essential pathological lesion consists of varying degrees of atrophy and degeneration of the muscle cells, and a replacement of them by an excessive formation of fibrous connective tissue. There results a local or generalized weakening of the uterine wall, which gives way at some stage in its distension late in pregnancy or in labor. Similar infectious processes affecting the myometrium may follow abortions, particularly infected induced abortions. That extensive pathological changes in the uterine wall resulting from previous puerperal infection at term, as well as from previous infected induced abortion, may predispose to spontaneous rupture in subsequent pregnancies is illustrated by the following two cases.

Case 1—Deaconess Hospital.* Mrs. M. S., a 29-year-old white para ii, gravida iii, had had two previous term parturitions, both complicated by postpartum hemorrhage. The second delivery, two years before the present admission, was followed by a moderately severe puerperal infection which persisted for three weeks.

The patient's L.M.P. was 9-24-34, and the course of the present pregnancy had been uneventful. The patient was first admitted to the hospital on 6-25-35 because of possible ruptured membranes. Vaginal examination under sterile precautions revealed the vertex engaged, a cervical dilatation of one finger, and apparently intact membranes. A medical induction consisting of castor oil and quinine was unsuccessful, and the patient was discharged the next day.

The patient was readmitted to the hospital at 9 p.m., 6-29-35, in moderate shock. Two hours before she had had two hard uterine contractions, followed almost immediately by nausea and general weakness. There had been only fleeting contractions in the lower abdomen since, and fetal movements had ceased. The temperature was 100.8°, respirations 24, pulse 100 and weak. Abdominal examination was inconclusive except for absent fetal heart sounds. Vaginal examination revealed an arm prolapsed through the incompletely dilated cervix.

The Author

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The general condition became rapidly worse, and the pulse rose to 120. One hour after admission fullness was apparent in both flanks, and fetal small parts were definitely palpable beneath the abdominal wall. A second vaginal examination, under general anesthesia, revealed a longitudinal rupture of the posterior lower segment of the uterus which admitted the examining hand into the peritoneal cavity.

At operation a large stillborn fetus and almost two liters of blood and clots were removed from the abdominal cavity. The uterus was found to be completely inverted through the rupture which extended up the entire length of the posterior uterine wall, with the still attached placenta presenting. A supra-vaginal hysterectomy and left salpingo-oophorectomy were performed, and the abdomen was closed without drainage. Fluids were administered intravenously before, during, and after the operation.

The post-operative course was stormy and febrile from the evening of the first day on. Signs of general peritonitis developed rapidly, and the patient died on the fifth day post-operative.

Necropsy revealed an acute generalized fibrinopurulent peritonitis and acute ileus; septic thrombosis of the right pampiniform plexus and of the iliac veins bilaterally; acute toxic hepatitis, splenitis, and nephritis; and pulmonary edema and congestion.

Microscopic examination (Fig. 1 and 2) of sections taken from different portions of the uterine wall revealed widespread atrophy and degeneration of the muscle cells, and extensive replacement by fibrous connective tissue. There was both general and focal infiltration of chronic inflammatory cells. A large canalized thrombus was present near the site of the rupture.

Case 2—General Hospital, No. 53138. Mrs. S. F., a 28-year-old para ii, gravida v, had had two normal term parturitions, and a spontaneous

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Submitted February 7, 1941.

* A private patient of Dr. D. J. Davies.

From the Department of Obstetrics, University of Cincinnati College of Medicine.

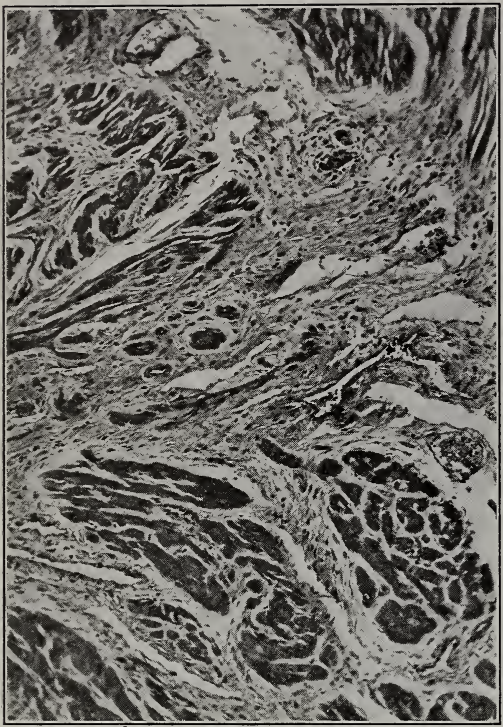

Fig. I. Low power, X 200. Spontaneous rupture of uterus following previous puerperal infection, Case I. Showing the marked replacement of the myometrium by fibrous connective tissue, and atrophic changes in the remaining groups of muscle cells.

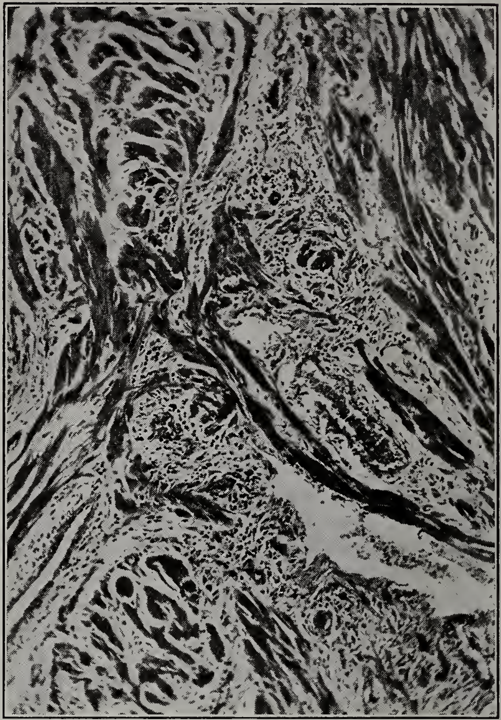

Fig. II. Low power, X 200. Spontaneous rupture of uterus following previous puerperal infection, Case I. Showing the general and focal infiltration of chronic inflammatory cells buried in the connective tissue reaction. Degenerative changes in the muscle cells are less marked than in Fig. I.

miscarriage at three months gestation. Thirteen months before the present admission, when again three months pregnant, the patient was dilated by a physician. Two days later she was admitted to the gynecological service with a diagnosis of incomplete infected abortion, and a currettage was performed twice before all of the necrotic placental tissue was removed. The high fever subsided rapidly, and the patient was discharged a week later.

Six months later the patient appeared in the obstetrical out-patient clinic. Her L.M.P. was 7-13-36, and a diagnosis of pregnancy of two months gestation was made. The course of the present pregnancy was uneventful except for a complaint of aching pain over the uterus during the first four months, and for a mild attack of pyelitis at four and one-half months, for which the patient was treated on the medical service for one week. At the last pre-natal visit, on 4-22-37, examination revealed the vertex engaged, LOA. That evening the patient took ii oz. of castor oil. She had irregular uterine contractions during the night, and at 6 a.m. the next morning there was a slight bloody show. One hour later the patient had a sudden sharp tearing pain in the L.L.Q., and felt "something swelling which moved upward" as the pain radiated over the upper abdomen. She felt weak and faint, and had to lie down. The uterine contractions ceased, there were no more fetal movements, and the bloody vaginal discharge increased.

On admission at 8:30 a.m. the patient was in shock, with a blood pressure of 80/50, and a rapid feeble pulse. The abdomen appeared unusually flat for a term pregnancy. There was a tender mass above the symphysis, generalized abdominal tenderness, and suggestive fullness of both flanks. Fetal small parts were palpable in the R.U.Q., and no presenting part could be identified. The fetal heart tones were absent. A diagnosis of ruptured uterus was made.

At operation the abdominal cavity was filled with blood and clots, and a large stillborn fetus was lying free in the upper abdomen. The placenta was partially extruding from a large rent in the left lateral aspect of the uterus. The rupture extended from the cervix upward to just below the origin of the left round ligament and into the adjacent broad ligament. A supracervical hysterectomy and left salpingo-oophorectomy were performed, and the abdomen was closed without drainage. Intravenous fluids and three blood transfusions were given. After a stormy and febrile course for the first five days the temperature gradually returned to normal, and the patient was discharged on the twentieth day post-operative.

Microscopic examination (Fig. 3) of sections taken from various portions of the uterus revealed marked degeneration and atrophy of the muscle cells, and diffuse areas of replacement by fibrous connective tissue. The connective tissue reaction appeared to be of old inflammatory origin. In addition, the rupture site was characterized by an acute cellular infiltration and hemorrhage.

DISCUSSION

In each of these two cases there was a definite history of a previous uterine infection accompanied by a moderately severe puerperal reaction, following a full term delivery and an infected induced abortion, respectively. Microscopic studies of both uteri revealed essentially the same picture, that of widespread degeneration and atrophy of the muscle cells, and extensive replacement of the myometrium by fibrous connective tissue.

As abortion is in effect a miniature labor, the mechanism of invasion of the uterus by infection during the early stages of pregnancy may be considered in no way different from that occurring during late pregnancy or at term. That the latent effect of infection on the myometrium following abortion is similar to that following term delivery is demonstrated by the almost identical pathological changes found in these two cases. Of three cases of spontaneous rupture of the uterus recently reported by Schwartz and Kurzrok,[4] there was a history of from one to three previous miscarriages in every case, and in one case abortion was induced illegally and eventually required currettage. Although no pathological findings were given in their report, such a definite history in their cases would suggest a previous pathological alteration of the uterine wall similar to the two cases reported above.

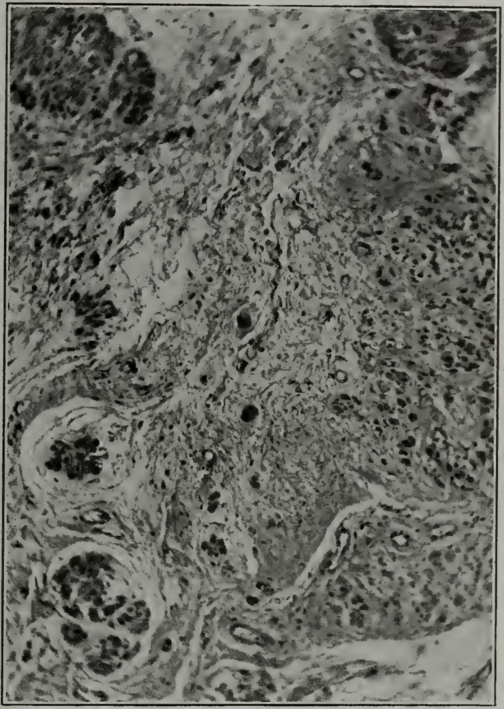

Fig. III. Low power, X 200. Spontaneous rupture of uterus following previous infected induced abortion, case II. Showing the widespread fibrous connective tissue reaction and replacement of the myometrium. Marked degenerative changes in the remaining islands of muscle cells are also apparent.

Taussig[5] has recently collected from the foreign literature the serious complications at subsequent child-birth resulting from previous abortion, particularly infected induced abortion. The incidence of prolonged difficult labor, uterine inertia, abnormalities and abnormal implantation of the placenta, adherent placenta, and postpartum hemorrhage was definitely increased in primiparae who had had one or more previous abortions as compared to primiparae without previous abortions. Similar complications at parturition, including placenta accreta,[6] are also more commonly observed in multiparae with a history of previous puerperal infection than in multiparae without such a history. Invasion of the endo- and myometrium to a varying extent by the postabortal or puerperal infection is the most likely cause of these complications at subsequent deliveries.

Because of the increased incidence of these serious complications, including spontaneous rupture of the uterus, it would seem expedient that patients with a history of previous uterine infection, whether following abortion or term parturition, should be observed closely during subsequent pregnancies and deliveries against their possible occurrence. In view of the definite pathological changes which may take place in the uterine wall, as demonstrated in the two cases reported above, it would even seem wise, in patients recovering from a severe puerperal infection, to advise a sufficient waiting period before pregnancy is again undertaken, and in selected cases to advise against future pregnancies entirely.

SUMMARY

Two cases of spontaneous rupture of the uterus at term, in patients with a history of previous uterine infection following term delivery and infected induced abortion, respectively, are reported.

Similar pathological changes of the uterine wall, consisting of marked degeneration and atrophy of the muscle cells and extensive replacement of the myometrium by fibrous connective tissue, were found in both cases.

Patients with a history of a previous uterine infection, whether following abortion or term parturition, warrant close observation during subsequent pregnancies and deliveries against the increased incidence of serious complications, including spontaneous rupture of the uterus.

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I am indebted to Drs. Ralph Johannsman, K. V. Kitzmiller, and W. M. German, pathologists at the General, Deaconess, and Good Samaritan Hospitals, respectively, for aid in interpreting the pathological sections.

Thrombosis and Embolism of the Abdominal Aorta

Report of a Case With Obstruction of the Renal Arteries

MORTIMER L. SIEGEL, M.D., AND CURTIS F. GARVIN, M.D.

THE literature contains numerous references to cases of thrombosis or embolism of the abdominal aorta as reviewed by Welch[1] (1899), Saltykow[2] (1911), Hesse[3] (1921), Banowitch and Ira[4] (1928) and Rothstein[5] (1935). These cases may be divided into two groups, first, those in which the thrombus is limited to the distal portion of the aorta, and second, those in which the upper level of the thrombus is at or above the orifices of the renal arteries.

Cases illustrative of the first group are uncommon but not rare. In the period from 1930 to 1939 inclusive, at the Cleveland City Hospital, 6547 consecutive autopsies included nine instances of completely occlusive thrombi of the aorta in which the orifices of the renal arteries were not involved. In these cases the clinical picture was dominated by symptoms and signs of interference with the circulation of the lower extremities, namely, sudden onset of pain and numbness, changes in the color, temperature, nerve supply and the arterial pulsations of the lower limbs, ending in some instances in gangrene.

These cases ordinarily have not been difficult to diagnose, but two other conditions have led to errors. In this same series of autopsied cases, there was one instance of complete occlusion of the orifices of the iliac arteries by separate thrombi. This produced a clinical picture indistinguishable from thrombosis in the distal portion of the aorta, but at postmortem examination the aorta was normal. Similarly cases of ischemic necrosis of the legs in which the peripheral arteries have been so sclerotic as to be devoid of pulsation have resulted in errors in diagnosis.

It is the purpose of this communication to describe cases in which occlusive thrombi of the aorta completely blocked the orifices of the renal arteries. Such cases are rare, only two having occurred in the period under consideration. They were perplexing clinical problems inasmuch as the signs of occlusion of the blood supply of the legs, while present, were not outstanding. In fact, evidence of visceral infarction predominated and preceded that of necrosis of the lower extremities. A description of one of these cases is as follows:

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R. S. (Case No. 176046), a white man, aged 50, admitted to Cleveland City Hospital July 3, 1937, complained of numbness of the feet. Previous observations indicated that the patient had had an attack of coronary thrombosis in February, 1936.

The present illness started June 12, 1937, with transient numbness of the right foot. This recurred periodically and the foot was noted to be cold. The patient was also short of breath. He worked, however, until June 30 when he suffered severe pain in the right lumbar region. Subsequently he voided small amounts of bloody urine infrequently. The lumbar pain persisted and radiated around the epigastrium and the right lower quadrant of the abdomen. Shortly before admission, the feet became numb.

Examination revealed a well developed, poorly nourished, acutely ill white man. The temperature was 38 C. (100 F). There was evidence of myocardial insufficiency, viz., shortness of breath, distended cervical veins, rales at the bases of the lungs and an enlarged liver. The heart was enlarged and the cardiac mechanism was auricular fibrillation with an apical rate of 110 beats per minute. There was marked tenderness in the epigastrium and in the region of the kidneys.

The radial pulse was small in volume and soft. The blood pressure was 110 systolic and 90 diastolic. Both femoral, popliteal, posterior tibial and dorsalis pedis arteries could not be felt to pulsate. The reflexes were present and equal. The legs were cold to the touch but showed no evidence of necrosis.

The urine contained gross blood; the leukocytes numbered 23,050 per cubic millimeter of blood.

Submitted March 23, 1941.

From the Department of Medicine of Cleveland City Hospital and the School of Medicine, Western Reserve University.

The clinical diagnosis was thrombosis of the aorta occluding the orifices of the renal arteries with bilateral, massive, renal infarction; coronary artery sclerosis; old myocardial infarction; cardiac hypertrophy and dilatation; auricular fibrillation; and myocardial insufficiency.

On the third hospital day the patient complained that the numbness of the legs had spread to the lower abdomen. The legs now were a mottled bluish red color. The patient died that day.

AUTOPSY FINDINGS

(Autopsy No. 11575, performed by Dr. M. R. Oldt two hours after death.) The heart weighed 500 Gm. and was dilated. The coronary arteries showed severe arteriosclerosis. There was an old healed infarct 4 cm. in diameter at the apex of the left ventricle. A mural thrombus was present at this point. The right ventricle and the left auricular appendage also contained mural thrombi. There was a recent splenic infarct measuring 1.5 cm. in diameter. The viscera showed chronic passive hyperemia.

The aorta was of the usual length and circumference and showed rather marked arteriosclerosis. The lumen of the abdominal aorta was completely occluded from the level of the renal arteries to the bifurcation by a mottled reddish-gray thrombus. This extended a short distance into both renal arteries and into the right iliac artery. The other branches of the aorta had patent lumina.

The right kidney weighed 250 Gm. and showed numerous confluent purplish yellow areas of necrosis. The left kidney weighed 150 Gm. and was similar except for the presence of an old infarct 4 cm. in diameter situated in the upper pole.

Microscopically the thrombosis in the aorta and renal arteries showed early organization. Sections of the kidney showed extensive infarction.

COMMENT

In this case, the signs of renal infarction dominated the clinical picture. However, because the patient had early symptoms and signs of interference with the circulation of the extremities, the thrombosis was localized to the abdominal aorta. The subsequent development of ischemic necrosis of the legs corroborated this concept.

One other condition which might cause difficulty in differential diagnosis was encountered in this study. Two of the nine cases of thrombus in the distal aorta previously referred to showed associated renal infarction due to separate thrombi in the renal arteries. If the renal infarction were massive such cases would be clinically indistinguishable from the case here reported. Actually in these two cases, the renal infarction was not extensive.

SUMMARY

Cases of complete thrombosis of the aorta in which the thrombus is limited to the distal portion of the aorta are uncommon but not rare. Nine such autopsied cases have occurred at Cleveland City Hospital in the period from 1930 to 1939 inclusive. They ordinarily are not difficult to recognize clinically.

Occlusive thrombosis of the aorta with obstruction of the orifices of the renal arteries is uncommon, two such cases having occurred in the period studied. They merit attention since signs of visceral infarction predominated and preceded those of necrosis of the lower extremities thus causing a perplexing clinical problem.

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"Stomach Trouble" From an Unusual Cause

ANTON W. OELGOETZ, M.D., Columbus, O.

The following case history was deemed sufficiently novel to merit reporting.

Mr. T. H., age 40, came complaining of "stomach trouble". He had been treated by many doctors, had passed through two large clinics, and had taken many pounds of alkalies, all without result.

History—His chief complaint was discomfort in the abdomen. That was as close as he could describe it. The discomfort was short of an actual pain and was not localized. It was never present at night, always going away when he retired, but it reappeared each morning soon after he left his bed. It bore no relation to the digestive cycle. The trouble had gradually developed about two years ago; he had previously been in excellent health.

Examination—A complete physical examination and gastro-enterological study disclosed nothing to account for his trouble, except that he was 40 pounds overweight and had a very prominent, overhanging abdomen. During the examination it was noted that the scrotum was rather more drawn up than usual, but we accounted for this by the fact that the room was a trifle chilly.

In checking back, it was found that the shrunken scrotum was really shrivelled because it contained nary a testicle. Both testicles were undescended, lying high up in the inguinal canal. Palpation over the testicle produced the man's pain. When he stood up—to make a long story short—his large abdomen lay upon his inguinal region, thereby bringing pressure upon his testicles, whereas when in the horizontal position, the pressure was removed and there was no discomfort.

Treatment—A ptosis belt to raise his abdomen off his testicles brought immediate relief. A reduced food intake plus thyroid substance caused a loss of 40 pounds and permanent solution of his problem.

The lesson—Always examine the testicles; they can sometimes be the cause of "stomach trouble".

Chills and Fever as a Manifestation of Sulfathiazole Toxicity

WM. E. MOLLE, M.D., AND WALTER BUCK, M.D.

SINCE the advent of sulfanilamide, numerous papers have been published dealing with its various toxic manifestations. As each new derivative has appeared, one waits for reports of the toxic manifestations, and, in many cases, these can be predicted beforehand. Of all these untoward symptoms, drug fever is perhaps the most common. Hageman and Blake[1] were among the first to report on fever due to sulfanilamide, and since then, numerous authors, writing on sulfanilamide, sulfapyridine and sulfathiazole have listed drug fever as one of the chief complications of therapy. In an excellent summary of the toxic manifestations of sulfanilamide and its derivatives, Long[2] and his co-workers mention three types of fever occurring in their cases. The first of these is the hectic, remitting type with chills and fever; the second a steadily mounting type; and the third a low continuous fever. Their paper, however, deals with all the sulfanilamide derivatives in a general manner. On reviewing the literature to date, we are unable to find a single case in which chills and fever are specifically reported as a manifestation of sulfathiazole toxicity. Since chills and fever are sometimes confusing in diagnosis, we feel the following case worthy of report.

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CASE REPORT

E. L. was a 25-year-old white female who entered the Cincinnati General Hospital on September 19, 1940, with the history of frequent passage of small quantities of urine with pain and burning on urination and some aching pain over her bladder area. She passed small quantities of blood on two occasions and noted nocturia four to five times every night. These symptoms had been present for two weeks. The day prior to admission she had a severe shaking chill lasting ten minutes and noted pain in her right flank—aggravated by inspiration.

She had several previous C.G.H. admissions—none of them related to her present illness.

Physical examination revealed a languid, acutely, but moderately ill white female lying quietly in bed. Temperature 101°—pulse 88—respiration 24.

The skin was warm and moist, and a thyroidectomy scar was noticed at the usual site.

The lungs were clear to palpation, percussion and auscultation. The heart was not enlarged to percussion. Rhythm was regular and a soft systolic murmur was heard at the apex. Blood pressure 110/70.

The abdomen was soft below the chest level with no masses or distension. The liver, spleen and kidneys were not palpated. There was tenderness in both flanks posteriorly, and this was especially marked over the costo-vertebral angle on the right. Extreme tenderness was elicited on attempting to palpate bimanually the right kidney. The fingers could be hooked over the right costal margin during deep inspiration without eliciting pain.

The temperature returned to normal within two days, but the tenderness over the right costo-vertebral angle persisted for three days. Pelvic examination was not performed on admission because the patient was menstruating, but on the third hospital day, examination revealed a marital introitus with very slight tenderness on movement of the cervix. The uterus was retroverted and adherent and the Fallopian tubes were palpable but not tender.

The results of the various laboratory findings were as follows: The hemoglobin was 12.0 grams (Sahli), the red blood count 4,000,000; the white blood count 13,200 with 78 per cent neutrophils, 18 per cent lymphocytes, 3 per cent monocytes and 1 per cent eosinophils. The platelets were normal in number. An uncentrifuged catheterized urine specimen was examined and 15 WBC/HPF and a one plus albumen were found. Gram stain of the fresh urinary sediment revealed gram negative rods and many gram positive cocci. Stool examination was not remarkable. The blood Kahn was negative as was the blood complement fixation for gonococcal infection. The E.K.G. was normal and B.M.R.'s on 9/25/40 and 9/27/40 were 6 per cent and 10 per cent, respectively. Repeated cultures of the urine were positive for B. Coli and Alpha Streptococci. Intra-venous pyelograms were normal. The diagnosis was: Right-sided pyelonephritis (pyelitis).

She was placed on sulfathiazole on her third hospital day (grs. XV every six hours) and was afebrile until the twelfth hospital day. At that time, she developed severe chills and fever, her temperature rising to as high as 105.8°, and she had as many as two and three chills a day. This continued for three days. At first, it was felt that she had a recurrence of her pyelonephritis (pyelitis), but examination of the urine revealed only 0 to 2 WBC/HPF and there was no tenderness over either kidney area. Urine culture at this time was positive for B. Coli and Alpha Streptococci. The patient complained of malaise, sore throat, generalized muscle aches and pains,

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and aching pain between her shoulder blades. She was nauseated and vomited frequently. Examination revealed no remarkable findings. The throat was slightly reddened, but no skin rash was present. Because of the possibility that chills and fever might be a symptom of sulfathiazole hypersensitivity, the drug was discontinued. She had no chills that day and her temperature was only 100°. The following day she felt and looked remarkably improved, had no complaints and ate well. Temperature was normal. The RBC and Hb maintained at a high level during this interval, i.e. 4,700,000 and 14.2 G (Sahli) respectively, and the WBC was 7,000. Blood cultures were negative. Conjunctivitis had not been noticed.

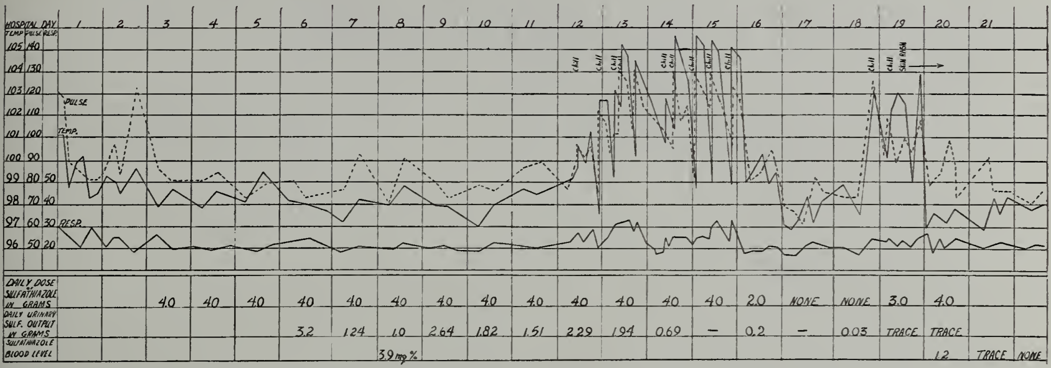

Chart No. 1

To substantiate the impression of drug chills and fever, she was again placed on sulfathiazole after two and one-half days of normal temperature. After 12 hours (three grams of sulfathiazole) she again had chills and fever and recurrence of exactly the same symptoms noted during the previous episode. At this time, the Hb was 14.0 G., the RBC 4,300,000 and the WBC 5,600 with 72 per cent neutrophils, 22 per cent lymphocytes, 3 per cent monocytes and 2 per cent basophiles. The following day the WBC had risen to 6,500 with approximately the same differential picture. Repeated urine examination revealed occasional WBC's. Culture of the urine continued positive for the same organisms. Stool examination remained negative. The chills and fever stopped immediately after discontinuance of the drug.

Twenty-four hours after sulfathiazole had been started, the patient broke out in a maculopapular eruption over the forehead, face, upper part of the thorax, arms and legs. Itching was associated with this eruption. Twenty-four hours after the drug was discontinued, the temperature and eruptions had disappeared and the patient felt well enough to wish to leave the hospital. Again conjunctivitis was not present. The patient was in a well lighted ward, but at no time was exposed to direct sunlight.

In the accompanying chart may be seen the temperature, pulse, respiration, daily dose of sulfathiazole, daily urinary output of sulfathiazole, and the time relation of the chills, fever and the skin rash.

DISCUSSION

As Long[2] has pointed out, the following may aid in the differentiation of drug chills and fever from chills and fever due to other causes. Firstly, there are usually one or more days of normal temperature before onset of drug chills and fever; secondly, the onset is usually abrupt; and thirdly, the chills and fever subside promptly with the discontinuance of the drug. These differential points are well illustrated by this case.

In addition, it is readily apparent how drug chills and fever may be confusing in the diagnosis, particularly when occurring in a disease prone to cause chills and fever.

SUMMARY

A case of pyelonephritis (pyelitis) treated with sulfathiazole is presented. Chills and fever developed 10 days after the beginning of therapy and subsided at once, when the drug was discontinued. Subsequent sulfathiazole given after two and one-half days of normal temperature again produced chills and fever which again promptly disappeared when the drug was discontinued.

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Treatment of Pneumonia

To an audience such as this it is hardly necessary to point out that in either serum therapy or chemotherapy other nonspecific measures in the management of the disease should be carried out as usual. Pneumonia patients will always require meticulous nursing care. Oxygen therapy will often be indicated and will be instituted when considered necessary by the physician. Adequate fluid intake and measures to combat abdominal distention, to control the acute mania that occasionally develops and prevent and control vasomotor collapse, and proper attention to diet and elimination will always be instituted promptly by the physician and the nurse when the occasion warrants.—Paul F. Whitaker, M.D., F.A.C.P., Kinston; Southern Med. and Surg., Vol. 103, No. 4, April, 1941.

Acute Suppurative Nephritis Following Hysterectomy

Case Report

EDUARD EICHNER, M.D.

ACUTE diffuse suppurative nephritis is a non-tuberculous renal infection. Its source, according to Eisendrath and Rolnick,[1] may be urogenous, lymphogenous or hematogenous. The first is highly doubtful, while the second is questioned on anatomic and embryonic grounds, since lymph drainage of the ureter is definitely segmental. Coccal infections usually occur by the hematogenous route. MacKenzie and Wallace[2] claim that a combination of the two latter methods is the rule. These authors also state that renal involvement does not occur without stasis on the affected side.

With the exception of renal carbuncle which is usually secondary to skin infection,[1] the pathological processes of renal infections are identical after the first 48 to 72 hours, regardless of the source. In the descending or hematogenous types, there are multiple abscesses of the glomeruli which slowly spread through the parenchyma to the renal pelvis by means of septic thrombophlebitis. In the urogenous and lymphogenous types, the process is reversed.

Curtis[3] stressed the relation of pelvic pain and chronic infection of the cervix uteri to infections of the urinary tract, and Carter[4] has shown that left sub-diaphragmatic abscesses are frequently the result of pelvic infection. Winsbury-White[5] demonstrated experimentally uterocervical lymph drainage through the infundibulopelvic ligaments to the peri-ureteral and renal-aortic lymph nodes. Poirier and Cuneo[6] demonstrated drainage from the cervix into the lymph vessels of the bladder and distal ureter. MacKenzie and Wallace[2] deny that retrograde drainage from the renal-aortic nodes to the kidney takes place. In 1938, Nelson[7] reported 87 cases of urinary infection secondary to cervicitis. Of these, 29 were definitely pyogenic, and 19 involved the upper urinary tract. Schultz[8] reported a patient with multiple abscesses of the kidney caused by B. Subtilis. This patient had been treated for over one month for pyelitis.

Report of the present case follows:

Mrs. E. Q. No. S-4210 was admitted to Mount Sinai Hospital on July 9, 1939, complaining of lower abdominal pain of five years' duration, especially in the left lower quadrant, and more so since an accident the preceding March. She was a secundipara, aged 37. Her first child was stillborn after a prolonged and difficult labor. The second child has a transverse myelitis of the upper dorsal cord, the result of birth trauma following a difficult breech extraction. The third pregnancy ended in a spontaneous abortion at three months in 1935, after which curettement was done for continued bleeding. Since then, her menstrual periods were normal, and the genitourinary tract was negative.

The Author

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On physical examination, she had a diffuse colloid goitre and lower abdominal tenderness with slight muscle spasm in the left lower quadrant. Vaginal examination showed a markedly relaxed outlet, and a rectocele was present. The cervix was badly lacerated, eroded, hypertrophied and studded with Nabothian cysts. The left cervical laceration extended to the vault, and the parametrium was thickened. There was moderate uterosacral tenderness. The uterus was anterior, the size of an eight-week pregnancy, firm, slightly irregular and fixed. The adnexae were apparently normal. Profuse mucopurulent discharge was present. The urine was normal. The red count was 3.9 million; hemoglobin was 80 per cent and the white count was 8200.

On the day following admission, under gas-ether anesthesia, repair of the rectocele, perineorrhaphy, appendectomy and total hysterectomy were performed. The adnexae were found normal. There was a continued oozing at the base of the left broad ligament which was controlled by continuous interlocking No. 0 plain catgut. The vaginal cuff was left open. At the end of the operation the patient's condition was good and she was returned to her room with a Pezzer catheter in her bladder. This was removed on the third postoperative day at which time the urine showed four to five white blood cells per high power field in a centrifuged specimen. The temperature, which was 100.8°F on the second postoperative day, reached normal on the evening of the fourth day. The patient was out of bed on the tenth postoperative day. On July 22, twelve days after operation, the abdominal wound was healed. There was no abdominal tenderness, and the vaginal cuff was open, slightly thickened and not tender.

Two hours after the patient was examined she complained of left abdominal cramps, which increased in severity. She vomited and her temperature rose to 101. Thirteen hours after the vaginal examination she had a severe chill lasting 15 minutes after which her temperature rose to 104. At this time the white count was 16,000, there was marked left costovertebral tender-

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Submitted February 11, 1941.

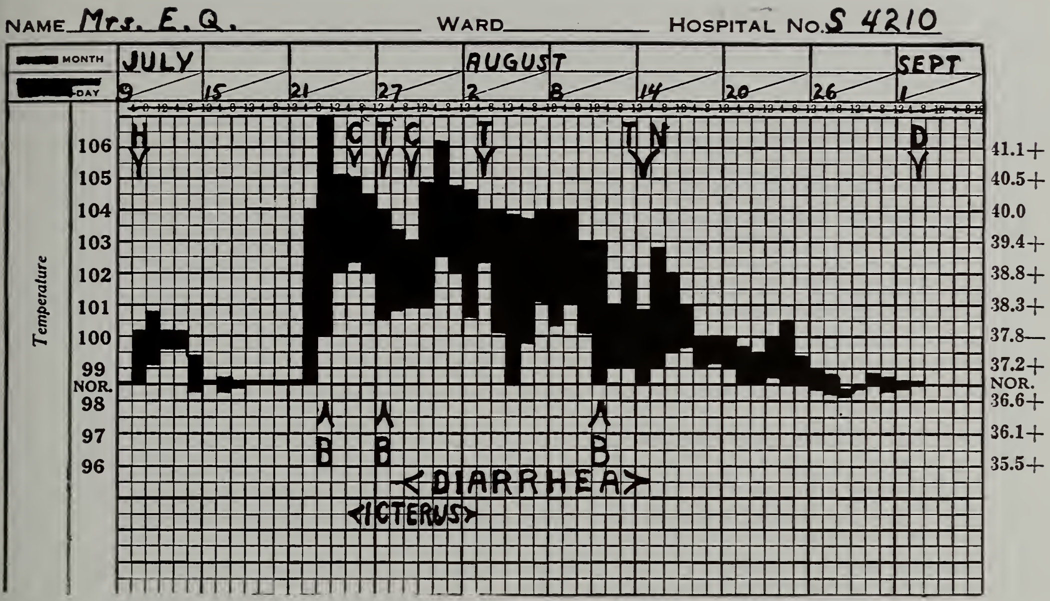

FIGURE 1 - COMPOSITE TEMPERATURE AND THERAPY CHART, SHOWING DAILY MAXIMAL AND MINIMAL RECTAL TEMPERATURES.

LEGENDS: H - HYSTERECTOMY C - CYSTOSCOPY
T - TRANSFUSION N - NEPHRECTOMY
B - BLOOD CULTURE D - DATE OF DISCHARGE
V, Λ, ≺ AND/OR ≻ - ARROWS TO SPECIFIC DATES.

ness and pus was found in her urine. She had another chill the following morning and a third chill in the afternoon, at which time temperature was 107 degrees. A blood culture was taken during this chill and was later reported as contaminated. The urine was cloudy and clumps of pus were visible. Sulfanilamide, 10 grains four times daily, was given. During the next three days she received a total of 100 grains of sulfanilamide, and the highest blood concentration was 6.7 mg. per cent. Cystoscopic examination was done on July 25 and showed evidence of a mild cystitis. The urine from the right ureter was grossly clear. No urine was obtained from the left kidney though the catheter remained in place over 12 hours. Both ureters were irrigated every three hours with 0.02 per cent solution of acriflavine.

On the evening of the 26th, slight jaundice was noticed. This was more marked by morning. A diagnosis of sulfanilamide poisoning and hemolytic anemia was made. A septic process in the region of the left kidney was also suspected. Sulfanilamide was discontinued. A transfusion of 600 cc. citrated whole blood followed by continuous intravenous of 5 per cent glucose solution was given. Blood chemistries were normal except for the elevated icteric index. Urine showed no bile but 3 plus urobiligen. A second blood culture was taken here and showed no growth. The patient was again cystoscoped on July 29, one week after the onset, and pyelograms taken. Only two to three cubic centimeters of urine were obtained from the left ureter. Left pyelogram showed evidence of an "intrarenal process somewhat compressing the renal pelvis." A severe diarrhea which had started on the previous day continued for over two weeks with only slight occasional remissions.

Mandelic acid, 180 grains daily, was given from July 30 to August 2 and then discontinued as there was no change in the urine and the patient's carbon-dioxide combining power had dropped 33.4 volumes per cent. A second transfusion of 700 cc. of citrated whole blood was given on August 3, by which time the jaundice had completely disappeared. Her general condition remained unchanged with daily temperatures ranging from 101 to 106.2°F. On August 5, intramuscular liver extract therapy was started. The red count, which on July 29 had dropped to under two million, rose to over three million. The temperature varied from normal to 104 and showed definite spikes. Signs of a left basal pneumonia appeared and there was marked abdominal tympanites. A left subdiaphragmatic abscess was considered.

X-rays taken on August 3 and 8 ruled out subphrenic abscess and abscess of the left lobe of the liver. The chest condition was improving and physical findings were localizing in the left kidney. When the blood culture taken on August 11 was reported negative, a left nephrectomy was performed by Doctor P. A. Jacobs on August 14. A transfusion of 600 cc. was given for postoperative shock. Her convalescence thereafter was uneventful and she was discharged from the hospital on September 2, 1939, 54 days after the first operation. (Fig. 1.) At present her condition is satisfactory and there is no evidence of residual urinary infection. The first blood culture and one from the stool reported a gram negative bacillus which was not identified. A pure culture of gram negative bacilli identified as B. pyocyaneus was obtained from the urine of the second cystoscopic examination. The same organism was grown from the kidney abscesses. B. pyocyaneus, a pyogenic organism, is frequently a secondary invader when it involves the kidney.

The pathological report was chronic cervicitis, erosion, Nabothian cysts, fibromyomata and endometriosis. The report on the kidney was acute diffuse suppurative nephritis with multiple abscesses caused by B. pyocyaneus infection.

SUMMARY AND DISCUSSION

Following a total hysterectomy and repair of a rectocele this patient made an uneventful recovery until the day she was to be discharged from the hospital. After the discharge examination she developed pain, chills and fever and then remained for almost six weeks not recovering until left nephrectomy had been done. Sulfanilamide caused a severe toxic reaction with jaundice and anemia. When the complicating pneumonia had resolved and subdiaphragmatic abscess had been excluded by X-ray findings, and repeated blood cultures had ruled out the presence of general sepsis, nephrectomy was performed. The diagnosis was left renal carbuncle on the anterior surface of the kidney with secondary diffuse suppurative nephritis caused by B. pyocyaneous. There was a localized peritonitis of this region. Recovery after nephrectomy was rapid.

Genito-urinary complications in gynecological surgery are seen frequently. According to the literature, there are definite lymphatic channels for the transmission of infection from the cervix to the bladder, and from the uterus through the infundibulo-pelvic ligaments to the peri-aortic renal nodes, and that a true ascending infection of the ureter comes only with urinary obstruction and gross infection of the urine. It cannot travel through the lymphatics as these are definitely segmental. Similarly, the peri-renal nodes drain the kidney and ureteral pelvis, but there is no retrograde drainage from these nodes back to the kidney. Most urologists now agree that the infection is hematogenous, entering the general circulation and filtered out by the kidney. If no ureteral obstruction is present kidney infection does not occur. This was demonstrated experimentally by the injection of lamp-black and other dyes into the uterus, cervix or bladder, after which one ureter was ligated. The kidney with the ligated ureter showed presence of the dye, while the other did not. Furthermore, the segmental lymphatics were not involved. Thus dye was found in the lymphatics of the bladder and the lower end of the ureter and in the kidney with the ligated ureter but not in the rest of the ureter. Dye was also present in the peri-ovarian lymphatics and the peri-aortic chain of nodes. At no time did either ureter, except at the bladder end, contain the dye. This demonstrated that infection was blood-born and came from the bladder or cervix.

Cystitis frequently results from the use of an indwelling catheter. Careful catheterization is the safer procedure. The Mayo and Cleveland Clinics[9] no longer use indwelling catheters, according to their recent reports. In the opinion of Doctor Jacobs, the urologist, the indwelling catheter was the original cause of the bladder infection. He believes the cystitis rather than the cervicitis caused the kidney abscess. On the basis of experimental work mentioned above, the necessary control of bleeding at the base of the left broad ligament at the time of the hysterectomy may have distorted or partially obstructed the left ureter for a time sufficient to permit the development of the kidney infection. Kinking or obstruction was not apparent at either cystoscopic examination. The acute onset suggests a possible embolic source.

To prevent cystitis, the intra-cystic installation of one-half per cent mercurochrome was advised by urologists at Johns Hopkins, but was found too irritating. Most patients develop a chemical cystitis even though they do void spontaneously. Prostigmin has been used with variable success.

When frequent catheterization or an indwelling catheter is necessary, the sulfonamides in doses of 10 grains three times daily have been of great prophylactic value. One must watch for drug-sensitivity.

The literature on the relationship of cervical to urinary tract infection has been briefly reviewed, and a case report of a patient, who developed a B. pyocyaneus renal carbuncle after a total hysterectomy, has been presented.

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Hour of Death

This study of the time of occurrence of all of the deaths reported in Los Angeles during the year 1935 reveals certain suggestive differences.

There are more deaths during the hours of the day than at night.

The daytime excess is most marked with apoplexy, heart disease, tuberculosis and pneumonia, and deaths from diabetes and from poisoning occur more often at night.—Emil Bogen, M.D., Olive View; Calif. and W. Med., Vol. 54, No. 5, May, 1941.

Clinical Aspects of Malignancy of the Lung

Case Reports

OSCAR BERGHAUSEN, B.A., M.D.

A YEAR ago attention was called to the incidence of mycotic infections in the lungs. Tumors may likewise lead to slowly progressive lesions marked by a rather sudden onset of pain with cough, dyspnoea and frequently hemoptysis. The clinical symptoms are due to irritation of the bronchial mucosa for this is the most frequent seat of the lesion, the cough being dry and hacking in character, frequently associated with wheezing. Later obstructive signs develop and a muco-purulent sputum frequently bloody in character. At the onset, fever is of a low grade, usually under 100 degrees, reaching a higher elevation as complications develop which likewise cause increasing cachexia.

Since many of the patients, about 80 per cent of whom are men, give a preceding history of pulmonary or pleuritic disorder as pneumonia, exudative pleurisy, influenza, chronic smokers' bronchitis or tuberculosis, it is well to think of a neoplasm of the lung when obstructive signs develop and supraclavicular glands become palpable. Occupation has little to do with this condition it seems.

Bronchiogenic carcinoma develops from the bronchial epithelium, bronchial mucous glands and the alveolar epithelium, arising from the squamous or cylindrical cells leading to an alveolar carcinoma varying in its type and arrangement of the cells at times simulating sarcoma. Usually arising in the large bronchi, occasionally in the smaller; mostly localized in character, occasionally diffuse. It is not known what causes this metaplasia of cells to assume in one instance the columnar type of cell by differentiation and in the other the squamous type.

Early in the development of the lesion in the larger bronchi direct inspection by the bronchoscope is indicated, which may lead to a visualization of the growth and securing a specimen for pathologic examination, or by detecting a rigid and fixed bronchus due to infiltration of the wall. At this stage the X-ray examination is helpful since it may lead to the visualization of partial atelectasis, hilar tumor, increased density of the hilus and solitary tumor shadows. When the lesion is not accessible to the bronchoscope, aspiration biopsy with an 18 bore needle may be resorted to under fluoroscopic control. It is said to be less severe on the patient. Later as obstructive signs develop, these special examinations are of little value and the X-ray may reveal the presence of effusion, seropneumothorax, elevation of the diaphragm on the side of the tumor, dislocation of the heart, trachea and mediastinum, induration, hilar lymphoma or pulmonary atelectasis. It therefore becomes necessary for the physician to think of the possibility of the presence of carcinoma of the lung which occurs in from 5 to 10 per cent of all carcinomas, when a rather sudden onset of pain in the chest, dyspnoea and cough develops and the etiology is obscure. The sudden onset may be caused by acute changes in a long existent tumor.

The Author

● Dr. Berghausen, Cincinnati, Ohio, is a graduate of the Medical College of Ohio, 1904; member American College of Physicians; diplomate, American Board of Internal Medicine.

During the past two years six men were observed at the Bethesda Hospital in three of whom the diagnosis of pulmonary malignancy was confirmed by a microscopic examination of the organs obtained at the autopsy. In the first case, the diagnosis of pulmonary malignancy could not have been made before death since the beginning lesion was discovered only in the microscopic examination of the prepared specimen.

Case 1. A white man aged 53 whose occupation was that of a hatter in a dry cleaning establishment was taken sick quite suddenly on April 11, 1940. He gave a history of nose bleeding in the summer of 1939. Because of glycosuria, injections of insulin were given and the proper diet prescribed. Evidences of cerebral hemorrhage developed after he was removed to the hospital on April 15, 1940 where he died on the 24th, 1940. The clinical diagnosis was cerebral hemorrhage, hypertensive heart disease, generalized atherosclerosis, chronic interstitial nephritis and glycosuria.

The report of the autopsy made by Dr. S. Tashiro was as follows: "Massive intraventricular hemorrhage (cerebral). Cerebral vascular sclerosis. Cerebral edema and congestion. Subarachnoid hemorrhage in the occipital region. Generalized atherosclerosis. Cardiac hypertrophy and dilatation. Atherosclerosis of the aorta, coronary and iliac arteries. Lobular pneumonia. Chronic passive congestion of the lungs. Chronic pulmonary emphysema. Fibrous pleural

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Read at a Clinical Meeting held in the Bethesda Hospital, March 14, 1941.

adhesions (right). Hydrothorax (left). Beginning lung abscess? (right lower lobe). Acute toxic splenitis. Fatty infiltration of the liver. Toxic nephrosis. Dental caries. Bilateral arcus senilis. Abrasions over the right tibial area."

Postmortem microscopic report: Chronic emphysema, anthracosis, and pulmonary edema. Beginning carcinoma of the lung; probably adeno-carcinoma. Kidney is congested; cloudy swelling of the tubules with deposit in the lumen. No changes in the suprarenal glands beyond cloudy swelling of the cells. Hyperplasia of the prostate with adenomatous changes. Pancreas shows islet tissue and some chronic interstitial changes. The islands are not as abundant as in the normal, but are numerous. Liver shows advanced fatty changes with destruction of much of the liver tissue. Lack of ability to deposit glycogen may have been a factor in the glycosuria, although the presence of subarachnoid hemorrhage and cerebral cortical atrophy must be considered as an additional factor. Chronic catarrhal cholecystitis and toxic splenitis. Generalized atherosclerosis.

In the second case the attention of the surgeon was called to a neoplasm located over the parietal bone of the skull and for which condition the patient was operated upon without a complete physical and X-ray examination of the chest.

Case 2. A white man, laborer, aged 38, entered the hospital on July 31, 1939 and died the following day. The cause of the death was given as pulmonary atelectasis which followed immediately after the removal of a traumatic fibroma located over the parietal bone of the skull at the upper and posterior part about one inch in diameter. This had become very sensitive due to an impingement of a branch of the auricular nerve.

The patient had received a severe blow on the head on April 25, 1939, causing the constant pain over this area ever since. Upon admission to the hospital the patient was apparently comfortable. The real condition of the lungs was not revealed by the hurried physical examination. The presence of a Corrigan pulse, a definite systolic and diastolic murmur in the third interspace just to the left of the sternum led to the diagnosis of luetic heart disease by the intern, who thought the tumor on the head was a gumma. The subsequent report of a positive Kahn and Wassermann test of the blood serum would tend to support this diagnosis. The urinalysis showed the absence of albumin, casts, and sugar. The maximum temperature was 99.6 degrees.

In the history there was no report of cough nor expectoration, the patient complained of the painful tumor over the parietal bone which the surgeon sought to remove; sudden death was attributed to pulmonary atelectasis. Dr. S. Tashiro examined the tumor mass removed at the time of the operation and described it as connective tissue in which there is moderate proliferation of fibrous tissue not neoplastic in character; extensive perivascular lymphocytic infiltration about the arterioles, making the diagnosis of syphilitic-peri-arteritis probable at the same time expressing the view that after the autopsy findings the translucent mass may well represent a metastatic carcinoma. The following is a report of the autopsy performed by Dr. Esther Marting: "Bronchogenic carcinoma of the left main stem bronchus with extension into the lung, atelectasis, and multiple abscesses in the left lung. Metastatic carcinoma in the tracheobronchial lymph nodes, liver and left kidney. Obliterative chronic fibrous pleuritis on the left and focal chronic fibrous pleuritis in the right. Chronic pulmonary emphysema and acute purulent bronchitis right. Toxic changes and beginning brown atrophy of the myocardium with moderate cardiac dilatation. Moderate generalized vascular sclerosis. C.P.C. and fatty infiltration of the liver. Abdominal ascites. Recent surgical incision of the scalp."

Postmortem microscopic report: Epidermoid carcinoma (of the bronchus) secondarily infected with infiltration of the pleura and metastases to the trachea, bronchial lymph nodes, liver, kidney and pancreas. Toxic myocardosis. Chronic passive congestion of the liver. Generalized atherosclerosis. Chronic fibrous pleuritis. Chronic passive congestion of the lungs. Miliary abscesses in the lung. Chronic pulmonary emphysema.

In the third case the proper evaluation of the clinical history, symptoms and signs led to the correct clinical diagnosis, the X-ray examination tending to support this diagnosis.

Case 3. A white man, aged 52, a night watchman, entered the hospital on November 22, 1940, where a diagnosis of possible carcinoma of the right lung with marked amount of fluid was made after surgical exploration of the chest. The chief symptoms were dyspnoea, hacking cough with much expectoration, and pain in the chest. The past history could not be obtained. Percussion dullness over the lower half of the right chest was present, and the diaphragm was fixed. Breath sounds and rales were present over this area, the breathing being tubular in quality. Nothing remarkable was revealed by an examination of the left side. The maximum temperature 101 degrees. Special examinations of the blood showed the presence of 3,470,000 red cells; 70 per cent hemoglobin; 16,100 white cells of which 84 per cent were segmented, 10 per cent stab cells and 6 per cent lymphocytes. The flocculation test for lues was negative. The urinalysis showed absence of sugar, albumin, and casts. The patient died December 8, the day following resection of the rib.

The following is a report of the X-ray examinations of the chest by Dr. E. R. Bader and the autopsy performed by Dr. S. Tashiro. Radiographic report made at the Bethesda Hospital November 23, 1940, is as follows: "Stereoscopic and lateral examination of the chest shows marked density in the lower one-half of the right chest which is suspicious of fluid or pus accumulation. Over the entire right side of the chest there is pleural thickening. The peribronchial tissue throughout the right chest shows increased density apparently the result of bronchial infection. The left chest is clear. Calcifications in the hilus regions are indicative of healed infections. The heart is of the horizontal type. The aorta shows no abnormal finding. Conclusion: Findings in the right chest are most probably the result of a resolving pneumonia. We also get the impression that malignancy is a possibility."

Report made November 26, 1940: "Portable examination of the chest shows the entire right side to be extremely dense giving the appearance of fluid or pus accumulation. The upper portion of the right chest is suggestive of pneumonic consolidation. In the middle portion there is noted an area of lessened density which is suspicious of a lung abscess or pneumothorax.

Excepting for the increase in peribronchial tissue the left chest is clear. The heart is displaced toward the left."

Report made December 5, 1940: "Portable examination of the chest shows generalized density over the right side especially marked in the base. The findings give the appearance of pleural thickening. The extreme density in the base suggests lung consolidation which, of course, may be the result of a tumor mass. A drainage tube is noted in the right side."

Summary of the autopsy findings is as follows: "Highly malignant neoplasm (Bronchogenic carcinoma or endothelioma) with metastases to the mediastinum and pericardium and possibly the left suprarenal gland with secondary infection resulting in: miliary abscesses of the right lower lobe. Fibrino-purulent pleuritis (right). Fibrino-purulent pericarditis. Bilateral hydrothorax. Acute pulmonary infarction (right lower lobe). Pericardial effusion. Fibrous pleural adhesion (right). Chronic pulmonary emphysema. Evidences of recent rib-resection (9th rib—right). Evidences of recent biopsy (right lower lobe). Extreme atherosclerosis of the aorta, coronary and iliac arteries, with calcifications. C.P.C. of the liver. Ptosis of the liver. Toxic changes of the viscera. Acute passive congestion of the kidneys. Congenital cyst of the right kidney. Cortical adenoma of the left suprarenal gland. Bilateral arcus senilis. Evidences of amputation left arm (mid-humerus)." Dr. S. Tashiro.

Postmortem microscopic report: Primary bronchogenic carcinoma with metastases in the lymph gland which also has small adenomatous areas. Chronic interstitial changes in the myocardium, pancreas, liver and spleen with evidence of congestion of the blood vessels. Abscess of the lung and a pulmonary infarct. Chronic fibropurulent inflammatory reaction in the pericardium and pleura.

In the fourth case the attention of the clinician was called to the possibility of the presence of pulmonary malignancy by the suggestive X-ray findings.

Case 4. A white man, retired, aged 62, entered the hospital on September 19, 1940, complaining of pain in the chest. Apparently he had been well up to March, 1940, when the pain in the left side of the chest first became manifest. At this time the X-ray examinations of the chest suggested the diagnosis of malignancy of the lung. From this time to the 19th day of September 12 aspirations of the chest cavity had been made to relieve the pleuritic effusion. Two weeks previously he developed a weakness of the right leg and arm, accompanied by much pain; vision in the right eye became impaired. There were no chills, fever, nor night sweats. The breath sounds were poor over the left upper lobe of the lung and absent over the lower lobe. Dullness extended to about the mid-scapular region. At this time no fluid could be obtained upon aspiration of this area. There was nothing significant in the examination of the heart.

The report of the X-ray examination of the chest by Dr. E. R. Bader at the Bethesda Hospital at this time was as follows: "Stereoscopic examination of the chest shows pleural thickening over the entire left side. In the base there is marked density giving the appearance of fluid accumulation. The peribronchial tissue throughout both sides of the chest shows marked increased density apparently the result of chronic bronchial infection. In the axial portion of the right base there is chronic bronchial infection and also circumscribed density either localized effusion or a pleural mass. Conclusion: In the previous examination of this patient, the final conclusion was that the lung lesions are most probably of malignant origin." September 19, 1940.

A subsequent report made by Dr. Bader on September 20, 1940, is as follows: "X-ray examination of the lower lumbar spine, pelvis, right and left femurs, knee regions and skull shows no finding significant of metastatic bone pathology. Slight hypertrophic arthritis is present in the lower lumbar spine."

Further examinations showed the presence of 3,820,000 red cells; 77 per cent hemoglobin; 13,150 white cells of which 12 per cent were lymphocytes, 83 per cent segmented cells, 3 per cent monocytes, and 2 per cent eosinophiles. The Wassermann test of the blood was negative; the urinalysis essentially negative, showing no albumin, sugar, nor casts.

The course was progressively downward, the patient dying on October 6, 1940. The report of the autopsy findings by Dr. S. Tashiro is as follows: "Malignant neoplasm (primary bronchiogenic carcinoma or endothelioma) of the left lower lobe with metastases to the right and left thoracic wall, kidneys, liver, and periaortic lymph nodes. Bilateral lobular pneumonia. Miliary abscess formation in the left lower lobe. Chronic passive congestion of the lungs. Chronic pulmonary emphysema. Hydrothorax (right). Atherosclerosis of the aorta and iliac arteries. Chronic perisplenitis. Chronic passive congestion of the liver and spleen. Evidences of a previous surgical incision in the left flank. Bilateral arcus senilis."

Postmortem microscopic report: Primary bronchiogenic carcinoma of the lung, of the adenocarcinomatous type tending to involve the periphera of the lung extensively, involving the liver and kidney by metastasis. The non-circumscribed type of lung tumor. Chronic interstitial changes are present in the liver and kidney. Atheromatous changes in the blood vessels and aorta. Adenomatous hyperplasia of the prostate. The lungs show areas of emphysema and lobular pneumonia with cellular exudate in the alveoli.

In the fifth case a diagnosis of metastatic pulmonary malignancy was made because a biopsy report of the examination made of a tumor removed from the knee in the previous year showed the presence of sarcoma of the bone. The X-ray examination of the lungs tended to confirm this diagnosis.

Case 5. A mechanic, aged 44, white, was admitted to the Bethesda Hospital July 22, 1940, complaining of sudden onset of pain in the right shoulder which had followed a strain of this shoulder while pushing a cart, a week previously. The pain was severe, sharp, and constant; extended from the mid-scapula posteriorly up and over the shoulder in the mid-clavicular line and downward in the same line to about the level of the third rib. He was also dizzy and dyspnoeic. He could lie in bed without discomfort; he had a non-productive cough. Upon physical examination of the chest, it was found that over the right lower and middle lobes and up to the fourth interspace anteriorly and to the scapula posteriorly, there was flatness on percussion, distant breathing sounds, decreased voice sounds, leading to a diagnosis of hydrothorax and consolidation of the lower two lobes of the right lung. From the history of the case it was ascertained that in February of the previous year a tumor, which was diagnosed round and spindle cell sarcoma had been removed from the right knee. A metastatic growth in the lung was diagnosed. The patient left the hospital on August 1, 1940, and went home. He later entered the General Hospital where the diagnosis of sarcoma of bone, with metastatic invasion of the lungs was confirmed. The patient died shortly afterwards but no autopsy was permitted.

The report of the X-ray examination by Dr. E. R. Bader is as follows: "X-ray examination of the chest shows marked density in the lower three-quarters of the right chest giving the appearance of gross fluid or pus accumulation. The left chest is clear. The heart shadow is displaced toward the left. Conclusion: Since there is a history of previous malignancy in the soft tissue of the knee region we are of the opinion that the fluid is most probably the result of a metastatic malignancy." July 22, 1940.

A subsequent X-ray report made by Dr. Bader on July 31, 1940, is as follows: "Stereoscopic and lateral examination of the chest shows the entire right chest to be opaque excepting for an area in the apex. Findings give the appearance of gross fluid or pus accumulation. The left chest is clear. The heart and aorta are grossly displaced to the left."

In the sixth case the diagnosis of pulmonary malignancy was suggested by the X-ray findings; there was no subsequent autopsy report to confirm the diagnosis. His death was caused by myocardial and renal insufficiency possibly developing secondarily to a luetic infection of many years' standing.

Case 6. A white man, manufacturer, aged 57, had been treated for lues which he contracted in his youth. At this time he was suffering from tabes dorsalis. His chief complaint was malaise, dyspnoea, distention of the abdomen and insomnia. When seen in consultation with Dr. Carl Hiller on April 9, 1940, he was suffering from marked myocardial insufficiency with edema of the extremities and the scrotum, abdominal ascites and enlarged liver. There was distinct dullness over the left lower lobe with diminished breath sounds and expansion; pleuritic effusion was present. The heart was somewhat enlarged, the result of hypertensive heart disease, the blood pressure measuring 146/90. The temperature was irregular with a maximum of 102 degrees. The urine was of low specific gravity, contained some albumin but no sugar nor casts. The blood urea was high 71.5 mg. per cent; the blood sugar and cholesterol determinations were low, 65 mg. per cent and 97 mg. per cent respectively. The blood Wassermann and flocculation test were negative. The blood examination made in January, 1940, showed the presence of 3,510,000 red cells; 7,400 white cells and 83 per cent hemoglobin; the differential count revealed the presence of 72 per cent segmented cells, 2 per cent stab cells, 1 per cent eosinophiles and 25 per cent lymphocytes. The course was steadily downward, the cardiac and renal insufficiency failing to yield to medication, the patient dying on April 29, 1940.

The reports of the X-ray examinations made at Bethesda Hospital by Dr. Bader were as follows: "Stereoscopic examination of the chest shows pleural thickening over the left chest, also slight infiltrate in the lung tissue. The right chest is clear. The heart shadow shows gross enlargement especially of the left ventricle. Conclusion: The heart configuration is suggestive of myocardial insufficiency. The findings in the left chest may be the result of an old infection, there is also possibility of passive congestion due to cardiac decompensation. The primary film of the abdomen shows the kidneys to be normal in position and size and no opacity of stone. There is moderate enlargement of liver. Examination of the gall bladder region made following the ingestion of the dye showed normal visualization and normal evacuation following the fatty meal. Conclusion: Normal functioning gallbladder. Examination of the gastro-intestinal tract made fluroscopically and with films showed no filling defect in the esophagus, stomach and duodenum suggestive of pathology. Four hours after meal there was normal progress of the barium through the stomach and small bowel. Examination of the large bowel 24 hours after the ingestion, and also per barium enema showed no filling defect and no obstruction. Fluroscopic examination of the chest showed normal heart pulsation which would rule out the pericardial effusion. There is shown a density in the lower portion of the left chest with a definite upper curved line giving the appearance of fluid accumulation. The findings in the left chest could be the result of malignancy. However a positive diagnosis could not definitely be made." January 3, 1940.

A subsequent report by Dr. Bader on January 15, 1940, is as follows: "Stereoscopic examination of the chest shows a marked density throughout the lower half of the left side giving the appearance of fluid accumulation. Throughout the upper portion of the left chest there is increase in the peribronchial tissue and marked infiltrate in the parenchyma. The right chest is clear. The heart shows definite enlargement especially in the left ventricle. Conclusion: The findings in the left chest as stated previously are most probably of malignant origin. There is no definite change since the examination of January 4, 1940.

Mastoidectomy

Simple mastoidectomy is indicated (a) if there is a completely developed acute or subacute mastoiditis, (b) if there are signs of an intracranial complication even in the absence of a completely developed mastoiditis.

Radical operation has a relative and an absolute indication. The relative indication is found in a chronic otitis affecting the bony walls of the middle ear and treated for a certain period of time without success. The absolute indication is found (a) when there are symptoms of the suppuration having passed the surgical margins of the middle ear, and (b) when symptoms of an intracranial complication are present.

In patients of old age or in patients with a general disease as arteriosclerosis, tuberculosis, diabetes, etc., or in patients who are deaf on the ear opposite to the discharging ear, one should always decide according to the absolute indication.—Hans Brunner, M.D., Chicago; Jour. Mich. S. M. S., May, 1941.

Craniocerebral Injuries

JAMES N. WYCHGEL, M.D., AND WALTER J. URBANSKI, M.D.

A SURVEY of 75 serious craniocerebral injuries treated at St. Alexis Hospital from February 21, 1937 to November 19, 1939 by lumbar puncture and dehydration revealed a total mortality of 17.3 per cent. Patients dying within three hours after admission were not included in this percentage. If the latter group, consisting of nine patients had been included, the mortality rate would be increased to 26.1 per cent. The study also reveals that the heretofore accepted indices of increased intracranial pressure (cerebral compression), namely, the increased blood pressure, the wide pulse pressure, fall in pulse rate, decrease in respiratory rate, are in many instances not reliable.

Until there is more general agreement among authorities as to the fundamental pathology and pathophysiology of craniocerebral injuries, the writers believe that some basic standard such as recommended by Mock[1] be adopted as a basis for all statistical studies of these injuries and their treatment. Skull fracture is positive evidence of trauma to a patient's head of sufficient force to cause a break in the bony structure within which the brain is contained. It is not positive evidence of injury to the brain. Mock's suggestion of recording cases with proved skull fractures (fractures of facial bones excluded) and practically proved skull fractures, has been followed. The mortality rate in such cases will be high.

Ninety cases diagnosed as "questionable concussion" were excluded from the survey because the signs and symptoms of "concussion" are subject to a wide difference of interpretation by various investigators. In these 90 cases, there was a 5 per cent mortality. Forty-two cases with bloody spinal fluid but without proved skull fractures were also excluded. This group had a mortality rate of 14 per cent. Were these questionable injuries included, the mortality rate for the total number of 207 cases would be 11.5 per cent. Investigators reporting such low mortality rates are probably including a number of questionable cases the pathology and pathophysiology of which is, as yet, uncertain.

Table No. 1—Mortality Study

Proved or practically proved skull fractures	No. of Cases	Death within 3 hours	Death within 24 hours	Death 24 hours	Total Deaths
1. Clear spinal fluid	17	0	0	0	0
2. Bloody spinal fluid	67	9	5	8	22
Totals	84	9	5	8	22
		10.7%	5.9%	9.5%	26.1%
Totals excluding deaths in 3 hours	75	excluded	5	8	13
			6.7%	10.6%	17.3%

The Authors

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SYMPTOMS

The pulse rate, blood pressure, pulse pressure, respiratory rate, and state of consciousness, although accepted indices of increased intracranial tension were, in many instances, found to be unreliable when the pressure was actually measured by spinal manometry. A lumbar puncture pressure of over 10 mm. of mercury was considered the measure of increased tension.

Diagnostic or therapeutic lumbar puncture was performed as soon as the patient recovered from shock. Munro[2] states with reference to shock and dehydration, "Before proceeding to the actual measurement by a lumbar manometer, certain facts must be obtained in order that the figures may be correctly interpreted. It is most important to know whether (1) the patient is in or just recovering from surgical shock and (2) whether there is any reason to suppose he is or has been dehydrated or has had his fluid intake limited. In either of these two situations an otherwise normal pressure may be lowered to O".

Patients who died within three hours after admission to the hospital were excluded leaving 75 cases for analysis (Table No. 1). Slowing of the pulse rate below normal as a result of increased tension was present in only 9.3 per cent of the cases studied. The respiratory rate was rarely below 18 and in only two cases (2.6 per cent), could the slow respiratory rate be considered an index of increased tension.

Increased blood pressure and pulse pressure used as an index of increased tension occurred

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Submitted January 21, 1941.

in 28 per cent and 31 per cent of the cases, respectively. These facts support the observations and opinions of Browder and Meyers[3] that measureably increased intracranial tension very often fails to produce the aforementioned signs said to indicate increased tension (see Fig. No. 1). Disturbed consciousness varied over a wide range. Some patients were dazed, irrational or aphasic, others in stupor or coma. Excluding such conditions as uremia or diabetic coma and making allowance for those deeply under the influence of alcohol, in a majority (69 per cent) of the cases, the state of consciousness might be considered an index of increased intracranial tension as measured by a lumbar manometer. The depth of coma is a good indicator of the severity of the injury.

Fig. No. 1. Illustrates the relationship of cerebrospinal fluid pressure, pulse rate, blood pressure, pulse pressure, respiratory rate in a patient, age 53, having cerebral lacerations and contusions, flattened cerebral convolutions, cerebral edema, and fractured skull.

Record from one hour from injury to death on third day.

Lack of conformance to the classical pattern is evident.

Shock as indicated by a subnormal temperature was a cause of death in several instances. The average duration of shock which occurred in 53 (71 per cent) of the patients was two hours.

Blood or serous drainage from the orifices is strong but not absolute evidence of skull fracture. This occurred in 23 (31 per cent) of the cases. Bleeding from rupture of ear drum and from soft tissue injury to nose are examples of exceptions. Drainage of spinal fluid is positive evidence of skull fracture.

Headache present in 80 per cent of the patients was frequently relieved by lumbar puncture. This relief occurred soon after lumbar puncture and we believe the withdrawal of the spinal fluid was responsible for the relief of this symptom.

Vomiting was present in 55 per cent of the cases. Some of the patients had overindulged in alcoholic liquor. Vomiting occurring in persons with head trauma should be considered evidence of intracranial injury until proved otherwise.

Temperature. In non-fatal cases, the temperature ranged from 99° F to 103°F. Temperature in 13 patients who died, excluding those who died within three hours, was 103°F or over. Four patients with temperature over 103°F, who were autopsied, showed hemorrhage in the brain.

Lumbar puncture. Fracture or practically proved fracture of the skull was present in all 75 patients observed. Spinal fluid was found to be bloody in 58 (77 per cent). In the remainder, the spinal fluid was clear. The highest spinal fluid pressure occurring in each individual was noted. In three patients, without demonstrable cerebrospinal fluid leaks, the highest pressure recorded at any time during their hospital stay was 8 mm. Hg. All three patients in addition to skull fracture showed strong but not absolute evidence of intracranial trauma as indicated by the presence of headache, daze, bloody spinal fluid, and bleeding from orifices. This is strong evidence that intracranial injury may exist without measurable increase in spinal fluid manometric pressure. In craniocerebral injuries some, as yet unexplained, pathology or pathophysiology, may occur to account for this lack of ten-

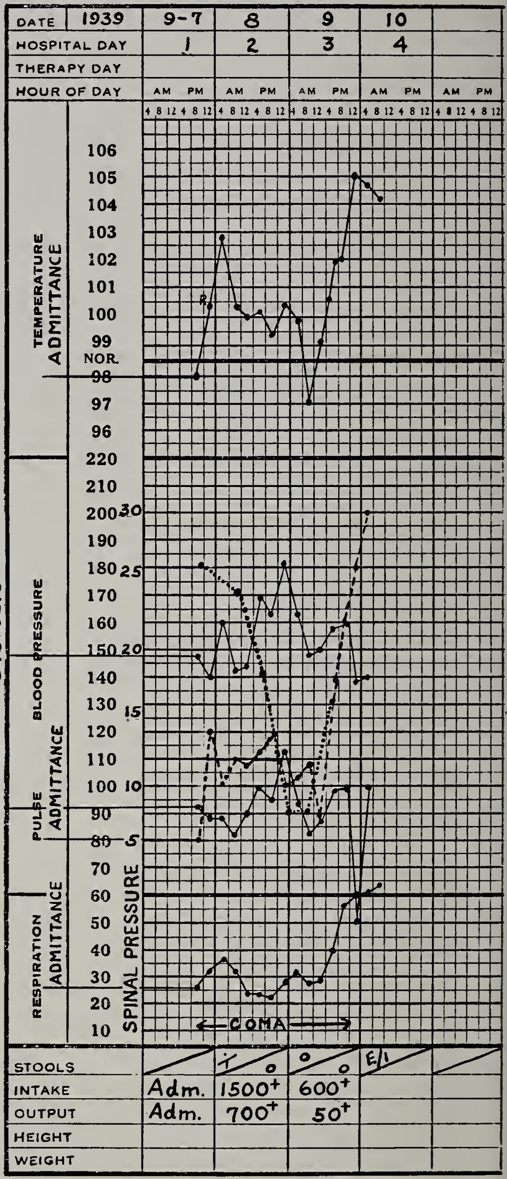

Figure No. 1

sion. The highest pressure recorded in the series was 43 mm. Hg. The average pressure of lumbar spinal fluid in the patients with bloody spinal fluid was 19.5 mm. Hg. and 12.4 mm. Hg. in those with clear fluid. Not infrequently, in comatose patients (excluding terminal hours), the spinal fluid pressure was low and the amount of bloody fluid scanty.

Lumbar puncture was performed on an average of six times on each patient showing bloody spinal fluid. The bloody fluid was recorded as Deep Red (tomato juice color) ++++, Light Red +++, Pink ++, and Xanthochromic +. It was noted that as the color changed from dark to lighter shades, the patient's condition, in most cases, improved concurrently. The change from dark to clear fluid usually required five to seven days. All patients with bloody spinal fluid were punctured at 8 hour intervals until the spinal fluid returned clear. In this respect, we try to follow the ideas of Fay,[4] Swift,[5] and others, who advocate the removal of the irritating bloody fluid from the subarachnoid space. Patients in whom the original fluid was clear, were punctured an average of 1.5 times. If a spinal fluid pressure of over 10 mm. of mercury indicates increased intracranial tension, then with few exceptions the cases studied showed such an increase.

After recovery from shock, all patients were treated by dehydration following closely the recommendations of Temple Fay.[4] Overdehydration was avoided as much as possible.

Subtemporal decompression was not done in this series. This operation has not been performed for acute craniocerebral injuries at St. Alexis Hospital for many years. When performed, the results were invariably fatal. Depressed fractures in two patients were elevated after the signs of intracranial trauma had diminished on the 7th and 24th days, respectively, following injury. Both recovered.

The four patients who came to autopsy demonstrated that acute subdural hematoma, when it occurred, was always associated with other intracranial injury so severe that the patient could not have survived the latter damage, and operation for the subdural hematoma would possibly have hastened the patient's death.

CONCLUSIONS

The mortality rate in this study of serious and definitely proved craniocerebral injuries treated by lumbar puncture and dehydration is lower than that usually reported for those who do not use this method of treatment. It is lower than the mortality rate in similar cases observed in St. Alexis Hospital before this treatment was instituted and we believe that this type of treatment is superior to the use of simple supportive measures.

Temple Fay[4] believes that in craniocerebral injury the headache is usually the result of increased intracranial pressure and that reduction of this pressure by lumbar puncture will relieve such headaches. Our results confirm this opinion and until a better explanation is forthcoming, we believe it should be accepted. The great frequency with which patients experience relief from headache and the tendency for irrational and restless patients to become quiet is good evidence that lumbar puncture is of definite value. Lumbar puncture is a reliable index of increased intracranial pressure in most cases except as previously stated in such conditions as shock or overdehydration. Whether the increased tension is due to edema or brain swelling (Shapiro and Jackson)[6] cannot be stated from a study of this type nor have we made observations on the increased intraventricular tension reported by Shapiro and Jackson.[6] The dilatation of the ventricles shutting off the foramens (Shapiro and Jackson)[6] may be an explanation as to why the lumbar puncture pressure was low (excluding terminal shock and terminal edema) in some of our patients when intracranial injury was obvious.

Lumbar puncture is a most accurate means of diagnosing intracranial injury. Bloody spinal fluid means bleeding into the subarachnoid space from torn pial vessels, from dural bleeding when the external pia is torn and from a traumatized brain. It is a most valuable prognostic sign. If clear, the prognosis for recovery is much better than when bloody.

The value of the blood pressure, pulse pressure, respiratory rate, have been overestimated as an index of increased intracranial tension as measured by lumbar puncture. Emphasis is placed on the fact that the tension was measured by lumbar puncture. Ventricular puncture was not done. Not infrequently, in comatose patients, the lumbar puncture pressure was low, the pulse pressure wide and the blood pressure high. Here the blood pressure and the pulse pressure may be considered an index of intracranial pathology or pathological physiology as yet unexplained. If the conclusions of Shapiro and Jackson[6] are correct, the high blood pressure and wide pulse pressure may be the result of an increased intracranial tension not recorded by lumbar puncture but occurring within the ventricles. A patient who is suffering with any of the types of disturbances of consciousness previously noted and who has a history of head trauma will, in most instances, be found to have an increase in intracranial tension as measured by lumbar puncture.

Simple and compound depressed fractures of the skull, subdural and epidural hemorrhages can be benefited by surgery. Acute subdural hemorrhages were, in our experience, frequently associated with evidence of generalized cerebral trauma. In such cases, surgical removal of the clot will probably not prevent the fatal outcome.

SUMMARY

1. Treatment of craniocerebral injuries by lumbar puncture and dehydration has in our experience decreased the mortality rate.

2. Increased intracranial tension is present and can be diagnosed and reduced by lumbar puncture in most instances.

3. In some instances, the blood pressure may be high, the pulse pressure wide, and patient have profound disturbances of consciousness without evidence of increased cerebral tension as measured by lumbar puncture.

4. The blood pressure, pulse rate, pulse pressure, may be of value as criteria of increased intracranial tension but their value has been overestimated.

5. The operation of subtemporal decompression should be abandoned in acute cerebral injuries.

6. Bloody spinal fluids usually become clear within five to ten days.

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Thoracentesis of Chest—An Inexpensive Method

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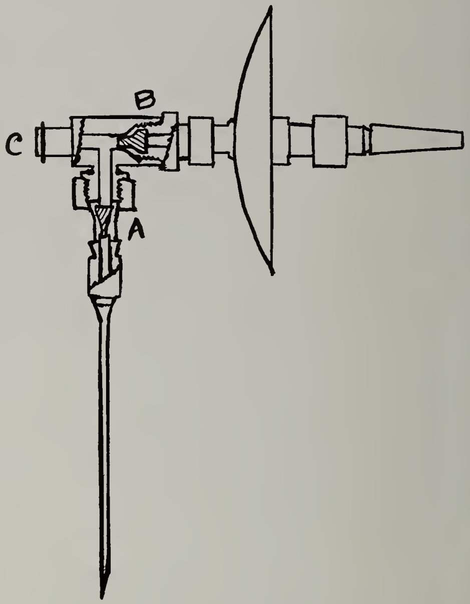
THORACENTESIS of the chest in massive effusion, from whatever cause, may be done by the use of an inexpensive apparatus which may, at present, be part of any physician's equipment. In the past, I have used a 20 or 50 cc. syringe, detaching the latter when emptying the syringe, being careful to prevent the ingress of air and the production of a pneumothorax. The Potain apparatus for thoracentesis would be the apparatus of choice, but cost and cumbersomeness of the equipment practically make the use of this equipment a hospital procedure. I have for some time used an irrigating syringe for irrigating the bladder or washing out impacted cerumen. This syringe* permits the irrigating solution to be taken up in the syringe through the intake A and expelled through B for irrigation.

By attaching the thoracentesis needle to the intake A, the syringe aspirates the chest, the fluid being removed from the syringe by pressure on the plunger without removal from the needle and, further, without danger of pneumothorax, since a small rubber valve in the apparatus at A prevents the fluid from re-entering the chest. I have soldered a thoracentesis needle to the intake valve opening. This is the only change required, and in no way impairs the syringe for other usage. A glass syringe with a Luer-lok may be used for this procedure in place of the metal syringe supplied with the equipment, if preferred, thus enabling the physician to note the appearance of the fluid.



Allergic Eczema

If the diagnosis is correct, if the skin testing is properly done and its limitations appreciated, if the results of the tests are intelligently, diligently and patiently applied, if the course of the symptoms is carefully watched and preconceived ideas avoided, the protein skin tests are a highly efficient method for the diagnosis and control of allergic eczema.—Hyman Miller, M.D., George Piness, M.D., and Willard F. Small, M.D., Los Angeles; Calif. and W. Med., Vol. 54, No. 5, May, 1941.

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*Syringe and valve mechanism manufactured by Becton-Dickinson Company No. 470 M. A Luer-lok attachment for application at point A on the drawing, makes it unnecessary to solder a needle at this point.

Surgical Relief of Intractable Pain in The Upper Extremity Due to Malignant Disease

LAURENCE M. WEINBERGER, M.D.

A VAST amount of information concerning the pathology, diagnosis, surgical treatment and subsequent statistics of carcinoma of the breast may be found in any standard textbook of surgery.[1,2,3,4] In contrast to an adequate discussion of these phases, one may search almost in vain, in the sections on mammary carcinoma, for methods of relieving the agonizing pain so often encountered in inoperable or recurrent malignancy. This is all the more astonishing since the compiled statistics indicate that a discouragingly large number of patients suffer recurrences and end their days tormented with pain.

Physicians faced with caring for these surgical failures frequently prescribe morphine in large quantities to assuage the patient's pain, taking refuge in the consolation that no moral considerations are involved in initiating drug addiction in a patient with an incurable disease. Unfortunately for the patient and embarrassing to the physician is the fact that in certain instances of slow growing or scirrhous carcinoma, survival may be a matter of two or three years. During this time the patient's tolerance for morphine increases, the pain though partly controlled is nevertheless ever present to some degree, and her morale steadily declines. She becomes absorbed in her sufferings, indifferent to her surroundings, morose, depressed and querulous and takes little interest in living except in anticipation of the next dose of narcotic.

In most instances, the immediate cause of the pain is invasion of the brachial plexus or the nerves in the axilla by the spreading or recurrent carcinoma. Frequently numbness and paralysis of the hand and arm and the associated lymphedema add to the patient's distress. Some of the surgical treatments advised for the relief of the intractable pain are difficult, temporary, dangerous or irrational. Amputation of the arm is an example of the latter. This is a useless procedure because the irritated nerves lie proximal to the amputation and the patient will continue to experience unalleviated pain in a phantom arm. Injection of the nerves with alcohol as they issue from the intervertebral foramina is technically difficult and the results capricious. Furthermore, in about half of these cases there occurs a severe burning alcoholic neuritis which is equally if not more distressing to the patient than the original pain. Moreover, the anesthesia produced fades in three or four months as the nerves regenerate. Subarachnoidal injection of alcohol is too dangerous in the cervical region because of the risk of producing a transverse alcoholic myelopathy. Surgical division of the cords of the brachial plexus is often impossible since they are imbedded in tumor mass and the nerves supplying the anterior chest wall cannot be reached if it is necessary to render that area analgetic. Anterior cordotomy is inadvisable since the incision into the spinal cord must be made as high as the second or third cervical cord segment and must be carried deep into the cord in order to raise the level of analgesia above the shoulder. This carries with it the serious risk of producing paralysis of the leg through injury to the pyramidal tract.

The Author

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The operation of choice in these cases and which in our hands has consistently yielded the best results is the intraspinal division of the dorsal roots supplying the hand, arm and shoulder, so-called posterior rhizotomy or ramisectomy. It is rapidly performed, technically easy and avoids the hazards of paralysis of the leg or bladder. What is more important, the relief of pain is certain and permanent. Regeneration of the roots never occurs when they are sectioned between the dorsal sensory ganglia and the spinal cord.

The following case is chosen to demonstrate the application of this procedure to the relief of intractable pain associated with recurrent carcinoma of the breast.

CASE REPORT

M.L., Surgical C85302 (courtesy of Dr. A. Grossman of the tumor clinic). The patient was a 52-year-old female who had a radical left mastectomy performed in October, 1937, for carcinoma. Following the operation she was given a course of deep roentgen therapy to the chest wall and axilla. She was then referred to the Michael Reese tumor clinic where she was followed at frequent intervals. There were no evidences of recurrence until February, 1940, at which time hard nodes were found in the left supraclavicular fossa. A course of radiotherapy

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From the neurosurgical division, Department of Neuropsychiatry of the Michael Reese Hospital.

Submitted December 27, 1940.

was instituted which caused the nodes to disappear for a time but they returned again in June, 1940. About this time her left arm began to swell and she experienced a vague diffuse ache in her left shoulder and upper arm. This became continuous and more severe and developed a drilling or boring quality. Within a few weeks severe stabbing and shooting pains appeared in the left forearm and radiated into the fingers. At first these were relieved by codeine but by September, 1940, the pain was no longer controlled with narcotics. She could not eat or sleep and rapidly lost weight. About this time numbness and weakness of the hand was noticed. Roentgenograms of the cervical spine, skull and chest showed no evidence of bony metastases. In view of the supraclavicular nodes and the neurologic signs, it was thought likely that the symptoms were due to neoplastic infiltrations into the brachial plexus. She was then referred to the neurosurgical service for treatment of the intractable pain.

Physical examination revealed that the patient was apparently in great pain. She held her left arm cradled in the right to avoid the pain produced by movement. The left supraclavicular fossa contained a mass of hard tumor nodules. There were a few also in the axilla, and in the edges of the scar. The left extremity was considerably swollen (Fig. 1), apparently due to blockage of the lymphatics. There was a marked paresis of the fingers involving particularly those movements innervated by the ulnar and median nerves. To a lesser degree, there was weakness of the deltoid and biceps muscles. An area of anesthesia could be outlined which involved mainly, though not completely, the ulnar distribution. The major nerve trunks were exquisitely tender to pressure.

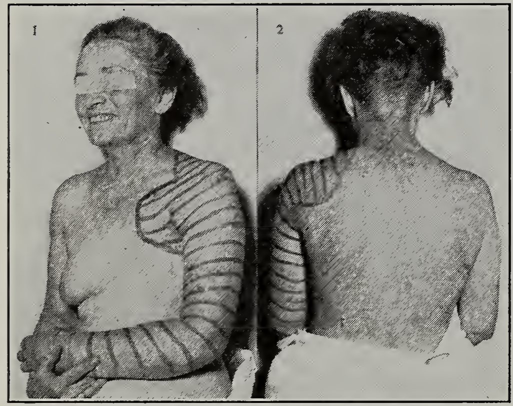

Fig. 1. The shading indicates the anesthesia produced by the rhizotomy. It encompasses all of the sensory areas supplied by the left brachial plexus. The lymphedema of arm and hand may be easily seen.

Fig. 2. Taken on the tenth post-operative day, the well healed wound is shown. The posterior extent of the anesthetic area is indicated by the shading.

Posterior rhizotomy was proposed to the patient. She readily assented to the operation, remarking that because of the pain, numbness, paralysis and swelling of her arm "the arm isn't any good to me anyway."

The operation was performed Oct. 28, 1940. With the patient anesthetized with intratracheal ether, she was placed face downward in a cerebellar head rest. A midline incision was made beginning at the first thoracic spinous process and carried upward to the fourth cervical spine. The spines and laminae of the 4th, 5th, 6th and 7th cervical and 1st thoracic vertebrae were removed. The spinal dura was opened and the arachnoidal membrane cut so as to expose the dorsal roots. These were picked up with a nerve hook and sectioned one by one until all the filaments of the 5th, 6th, 7th, 8th, and 1st thoracic roots were divided. The dura was closed with a continuous silk suture and the muscle, fascia and skin closed with interrupted silk sutures.

The post-operative course was uneventful. Because the patient's serum proteins were low, a transfusion of 500 cc. of citrated blood was given to ensure wound healing. She was up in a wheel chair on the eighth day, walking on the tenth day, and discharged on the thirteenth post-operative day with her wound completely healed (Fig. 2). She required no narcotics after operation as she was entirely relieved of pain in her arm. She was eating and sleeping well and gaining weight on discharge and viewed the future more cheerfully.

Sensory testing showed an absolute anesthesia and analgesia in the area outlined in the accompanying illustrations (Figs. 1 and 2). She was able to perform gross movements of the left arm while looking at it since the motor roots were preserved, but otherwise she was unaware of the fact that the arm existed, so complete was the anesthesia.

DISCUSSION

It is obvious that if an arm is completely deafferented by section of the posterior spinal roots, it is useless for coordinated movements, though not paralyzed. The patient being deprived of all information mediated by the deep muscle and tendon receptors does not know where her fingers are unless she looks at them. Even then she cannot perform delicate movements because she cannot evaluate the muscle tensions in her fingers. However, most patients are perfectly willing and happy to accept this price for permanent relief of pain. Most frequently the arm is useless to the patient before operation owing to pain on motion, neural impairment and lymphedema. The return of appetite due to the withdrawal of narcotics, the relief of pain permitting sleep, usually results in a prompt gain of weight. The patient becomes much more cheerful since the gnawing reminder of her fatal disease is removed.

The indications for posterior rhizotomy in a patient with malignant disease largely depend upon the expectation of life and the absence of other painful bony metastases. From my experience I believe that if there is a reasonable expectation of six months or more of life, the operation is justified. Occasionally one is surprised to find that a patient in desperate cachexia has picked up weight and strength and gone on to live an unexpected number of months after the operation. The presence of metastatic lesions in the lung fields per se does not contraindicate the operation unless there is such massive invasion as to reduce the life expectancy to less than six months. The presence of painful distant bony metastases or of intracranial metastases removes these patients from surgical consideration.

While we have spoken mainly of breast carcinoma since it is most common, posterior rhizotomy is the operation of choice in any malignant process involving the arm, shoulder, brachial and cervical plexuses. The common involvement of the brachial plexus or the bones of the shoulder girdle by superior sulcus carcinomata of the lung or by branchiogenic carcinoma, both of which cause pain early in their course, may be relieved by posterior rhizotomy. The boring pain of osteogenic sarcoma of the humerus, which is hardly assuaged by narcotics, may be relieved by rhizotomy. In short, cervical rhizotomy is the operation of election in intractable pain of the upper arm where loss of function of the arm is not an important consideration.

In general, it is unfair to minimize to oneself or to the patient the severity of the pain about which the patient complains. One is too prone to feel that the patient over exaggerates pain when he or she declares that large doses of narcotics do not relieve it. But as Leriche[5] writes: "Almost always, those who suffer, suffer quite as much as they say they do and that if we assess their pain with the attention it deserves, they suffer indeed more than we would imagine. There is only one pain that is easy to bear; it is the pain of others."

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Bacteriology of Poliomyelitis

Probably the most important development in the virology of poliomyelitis is the discovery of Armstrong that an occasional strain of the virus, after several serial passages, can produce paralysis in the eastern cotton rat. After serial passage through this animal it can be adapted to the ordinary white mouse of the laboratory. At first many investigators believed that this adapted virus was not the human poliomyelitis virus but a rodent strain of virus with properties similar to the human virus. However, most of these doubts have been dispelled.

The work of Armstrong has been confirmed by two independent laboratories working with two separate strains of virus. Toomey, who confirmed this work, used the old Flexner M. V. strain. The rodent-adapted viruses may be neutralized by antiserum to the original monkey passage virus. They may also be neutralized by human convalescent serum. In the acute stage of poliomyelitis, human serum fails to neutralize this virus but after convalescence the serum acquires neutralizing properties; thus a retrospective diagnosis may be made.

My belief is that this discovery is not important from the standpoint of aiding in the diagnosis of poliomyelitis, and diagnosis during convalesence is of very little aid to the clinician. However, the cotton rat and the mouse offer ideal experimental animals for many studies which were impossible when the monkey was the only available animal. The successful adaptation of poliomyelitis virus to the mouse has made it possible for investigators with limited budgets to study many phases of the problem.

I need mention no better example to illustrate the importance of a cheap, easily maintained laboratory animal than that of adapting yellow fever to the white mouse. It was after this discovery that investigators practically solved the problem of prophylactic prevention of yellow fever. That the adaptation of poliomyelitis virus to the mouse will lead to a satisfactory vaccine to immunize man is problematical. Nevertheless, it does give us courage and new hope, and opens up an entirely new approach for the epidemiologist. With technical assistance he may study the spread of this agent through a population by means of the neutralization test. Such studies will undoubtedly shed new light on the epidemiology of poliomyelitis.—William M. Hale, M.D., Iowa City; Jour. Iowa S. Med. Soc. Vol. XXXI, No. 6, June, 1941.

Gross Hemorrhage in Peptic Ulcer

One hundred and thirty-nine cases of duodenal ulcer and 29 cases of gastric ulcer with gross hemorrhages have been reviewed.

One hundred and thirty-four of the duodenal ulcer cases were treated medically with a mortality rate of 2.9 per cent. The mortality was approximately the same both in those cases put on a starvation regimen and in those given immediate feedings.

Twenty-eight cases of gastric ulcer with gross hemorrhage were treated medically, with a mortality of 28.5 per cent.

The combined medical mortality was 7.4 per cent for bleeding peptic ulcer in this series.

The rationale and fundamental principles of medical management were discussed.

The only type of patient that should have surgery for immediate control of hemorrhage is when bleeding continues for many days (even two or three weeks). In this small group operation may be a lifesaving measure.—Harry L. Segal, M.D., W. J. Merle Scott, M.D., Rochester, N. Y. and Roland S. Stevens, M.D., Chicago; N.Y.S. Jour. of Med., Vol. 41, No. 10, May 15, 1941.

Specific Therapy in Co-Seasonal Management of Hayfever

The Importance of Controlled Variation of the Dosage

L. E. SEYLER, M.D.

IN handling cases of pollen hayfever no matter what form of treatment is used, all of us have some failures. However, when symptoms have appeared during the season in a treated or even an untreated patient it is possible by close application to the size of the dose, route of administration and time interval between treatments, to give the patient additional relief. This additional relief will often turn a poor result into a good one. In my practice the patients fall into the following groups:

First, those who have had no pre-seasonal treatment.

Second, those who have not had time to obtain an adequate pre-seasonal dose.

Third, those who because of an individual idiosyncrasy cannot be built up to an adequate pre-seasonal dose because of general reactions.

Fourth, those who have reached a seemingly adequate dose before the season but still have severe hayfever symptoms.

The patient who first appears for treatment at the beginning or during his hayfever season can be given very satisfactory results by pollen injections. These can be given in one of two different ways. If the patient by skin test has only a mild or average sensitivity he is best treated by small subcutaneous treatments. These are begun with 0.10 of the dilution that gives a small or no skin reaction on intracutaneous test. If the first dose gives relief for 48 hours it is repeated on the next visit. If the first dose does not give relief it is doubled at the next visit. This method is continued making increases only when the symptoms are not controlled by the previous treatment. When relief is obtained for longer than 48 hours the next dose can be postponed until symptoms return.

When the patient is shown by skin test to be highly sensitive to his offending pollen the intracutaneous route is usually best for co-seasonal treatment. Here the first dose should be given with a dilution that intracutaneous injection of 0.02 ccs. will give a wheal from one to one and a half centimeters in diameter. The patient should wait in the office so the size of the wheal may be recorded. This dosage will usually give relief for several days. It can then be repeated making no increase. If relief is not obtained by this method the subcutaneous method may then be tried. Where it can be used, the intracutaneous co-seasonal treatment works better and the office visits are not so numerous. The two methods should not be given simultaneously.

The Author

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A patient that reports for treatment less than six weeks before the season cannot reach an adequate pre-seasonal dose before the season begins in most cases. These patients are placed on the usual pre-seasonal schedule and carried as high as possible before the season begins. After the pollen to which they are sensitive appears in the air, if their symptoms are well controlled, the dose they have reached is continued every third day. If their hayfever symptoms appear to be increasing in spite of this treatment all large doses are discontinued and they are treated by small subcutaneous doses as described above for those patients who began their treatment during the season.

There is a small group of patients who cannot be carried up to the usual pre-seasonal doses because of repeated general reaction; this point usually is in 1-500 dilution. These cases are carried as high as possible before the season begins, then the dose is dropped at the start of the season about 50 per cent and given once a week. If symptoms appear the treatment is fortified with small subcutaneous doses as described under co-seasonal treatment. When the fairly large subcutaneous dose is given the small dose should not be given on the same day.

There is also an occasional patient who must begin his pre-seasonal treatment with very small doses, and who can be given only very small increases at each treatment. These cases are often not carried above the 1-10,000 dilution before the season begins. In some of them this same top dose can be given through the season at weekly intervals with good results. In others they are made worse by their maintenance dose and this must be reduced and their treatment fortified with frequent intracutaneous treatment given as described for patients beginning treatment during the season.

A large percentage of patients who have had adequate treatment pre-seasonally or perennially before the season can be carried through the season with weekly doses of the dosage they reached before the season began. However, if they begin to have symptoms, especially after a

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Submitted June 24, 1941.

maintenance dose, their weekly dose of pollen extract must be reduced to about one half. If they continue to have difficulty this maintenance dose should be reduced even more unless it has been noticed that they are improved for a time after receiving it. In these patients also small subcutaneous doses used as described under the co-seasonal treatment will often change a poor result into a good one. They may require somewhat larger doses than the cases who have had no pre-seasonal treatment, but they must be treated cautiously not increasing the size of dose unless the previous one has not controlled the symptoms.

In an occasional patient who has had fair pre-seasonal treatment but in whom it has been noticed that the increases must be made slower and more cautiously than average, co-seasonal treatment is more effective with the intracutaneous co-seasonal method.

SUMMARY

By carefully controlled small subcutaneous or intracutaneous injections of pollen extract given co-seasonally to treated or untreated hayfever patients, it is frequently possible to give them marked relief from their hayfever symptoms. It is very necessary to pay strict attention to size of dosage, method, and frequency of administration to obtain the most satisfactory result.

CASE REPORTS

First Case—A white woman, 34, first seen August 14, 1937, has had hayfever 13 years from August 15 until frost. Last four years has had asthma beginning a week to 10 days after hayfever begins. No allergy except occasional hives out of season. She gave positive intradermal reactions to the following foods: Milk, celery, parsnips, peanuts, garlic, mustard, hops and cantaloupe. Scratch test 2 per cent solution all pollens negative except giant and short ragweeds—wheal 1 centimeter by 1½ centimeters.

She was advised to omit reacting foods from her diet. Symptoms had lasted two days when first seen consisting of moderately severe hayfever. The following treatments with ragweed extract were given during the season:

8/14/37	.05	1-5000	subcutaneous	
8/16/37	.07	1-5000	subcutaneous	better, few symptoms but very sore arm
8/17/37	.02	1-5000	intradermal,	arm very sore last time for 24 hours, and some blockage last night
8/18/37	.02	1-5000	intradermal	better today
8/20/37	.02	1-5000	intradermal	doing well over night, sneezing constantly this morning
8/21/37	.03	1-5000	intradermal	still sneezing
8/23/37	.04	1-5000	intradermal	doing better
8/25/37	.04	1-5000	intradermal	good
8/27/37	.04	1-5000	intradermal	some sneezing and blockage last night
8/30/37	.04	1-5000	intradermal	doing fairly well
9/1/37	.04	1-5000	intradermal	severe blockage last night, coughed but no asthma
9/3/37	.04	1-5000	intradermal	feeling better
9/5/37	.04	1-5000	intradermal	feeling good
9/7/37	.04	1-5000	intradermal	good
9/9/37	.04	1-5000	intradermal	very few symptoms
9/11/37	.04	1-5000	intradermal	very few symptoms
9/14/37	.04	1-5000	intradermal	very few symptoms
9/17/37	.04	1-5000	intradermal	very few symptoms
9/21/37	.04	1-5000	intradermal	very few symptoms
9/24/37	.04	1-5000	intradermal	very few symptoms

This patient was well controlled by intradermal treatment from the very start of the season. The treatment was changed to intradermal type because on trial it seemed more effective and did not produce a severely sore arm. This patient did not do nearly so well the following year on regular pre-seasonal treatment.

Second Case—A white male, 34, who has had hayfever from August 9 until frost for 20 years. Severe asthma during last week in August and the first three weeks of September for nine years except when he goes to a part of the country free from ragweed pollen. Pollen scratch tests, positive 2 per cent solution cocklebur—wheal 1 centimeter by 2 centimeters, giant ragweed—wheal 1 centimeter by 2½ centimeters, short ragweed—wheal 1 centimeter by 2 centimeters. Dog hair intradermal 1-1000, 1½ centimeters in diameter. House dust 1-1000, 1 centimeter in diameter. Foods, positive, intradermal 1-500 to plums, prunes, nuts, chocolate.

He was advised to omit positive foods from his diet from August 1 until frost.

Treatments in 1940 with combined ragweed are as follows:

4/22/40	.05	1-5000	
4/26/40	.10	1-5000	
4/30/40	.20	1-5000	
5/3/40	.05	1-1000	
5/10/40	.09	1-1000	
5/13/40	.12	1-1000	
5/16/40	.16	1-1000	
5/21/40	.21	1-1000	sore arm
5/24/40	.28	1-1000	
5/28/40	.38	1-1000	
5/31/40	.50	1-1000	
6/4/40	.65	1-1000	
6/7/40	.85	1-1000	
6/10/40	.10	1-1000	
6/13/40	.13	1-1000	
6/17/40	.22	1-1000	
6/21/40	.30	1-100	very sore arm
6/25/40	.30	1-100	
6/28/40	.40	1-100	
7/1/40	.55	1-100	
7/9/40	.65	1-100	
7/15/40	.14	1-100	
7/18/40	.17	1-20	hayfever symptoms that night
7/23/40	.20	1-20	
7/26/40	.25	1-20	
7/30/40	.32	1-20	
8/2/40	.40	1-20	hayfever symptoms that night
8/9/40	.40	1-20	
8/12/40	.10	1-5000	hayfever symptoms today
8/13/40	.20	1-5000	hayfever symptoms worse
8/15/40	.20	1-5000	better since last treatment until this a.m.
8/19/40	.08 .20	1-20 1-5000	symptoms quite mild since last visit
8/22/40	.30	1-5000	symptoms mild but more than before last treatment
8/23/40	.40	1-5000	symptoms moderately severe
8/26/40	.40	1-5000	symptoms very mild
8/30/40	.50	1-5000	symptoms a little more severe, bad early today
9/3/40	.50	1-5000	doing well
9/5/40	.60	1-5000	moderately severe but not uncomfortably so
9/7/40	.70	1-5000	doing well
9/10/40	.70	1-5000	doing well

Patient left on his vacation.

The case received a pre-seasonal dose of 20,000 pollen units. Ususally in this area adequate pre-seasonal treatment, although some cases are carried higher. This patient had symptoms in spite of this dose; these were satisfactorily controlled by co-seasonal subcutaneous treatment. Thus a poor or fair result was turned into a good one.

Third Case—A young female, 26, has had hayfever three years beginning about Decoration Day or a little before and lasting until Labor Day—most severe in June. She has some chest heaviness at night but no real wheezing. No difficulty with her breathing is present the rest of the year.

On skin testing to pollens she gave a reaction wheal to English Plantain one-half of a centimeter by one centimeter. But intradermal 1-20,000 gave a wheal two centimeters in diameter. No other pollen sensitivity. House dust 1-1000 intradermal, two centimeters in diameter. Foods intradermal, celery, cucumber, wheat, and rye, positive.

She was advised to cover her mattress and pillows with dust proof covers and to omit positive reacting foods from her diet during the season. Eye drops and nose drops, prescribed nothing by mouth.

Treatment in 1937 with English Plantain was given subcutaneously as follows:

6/11/37	.02	1-20,000	Very sore arm but hayfever better
6/14/37	.02	1-40,000	Red area for two days hayfever good
6/16/37	.02	1-40,000	No soreness some return of hayfever
6/21/37	.04	1-40,000	Some soreness of arm, some improvement in symptoms but still not as good as last week.
6/25/37	.06	1-40,000	Arm quite sore, hayfever good
6/28/37	.05	1-40,000	No soreness, hayfever good
6/30/37	.04	1-40,000	No soreness, hayfever good until this morning
7/2/37	.06	1-40,000	No soreness, hayfever fine
7/6/37	.07	1-40,000	No soreness, some hayfever
7/8/37	.10	1-40,000	More soreness, hayfever good
7/10/37	.12	1-40,000	No soreness, hayfever fair
7/12/37	.15	1-40,000	Very sore arm, hayfever fair
7/16/37	.12	1-40,000	No soreness, hayfever worse night of treatment.
7/19/37	.13	1-40,000	No soreness, hayfever fair
7/22/37	.15	1-40,000	Slight soreness, hayfever good
7/26/37	.15	1-40,000	No soreness, no hayfever
7/29/37	.18	1-40,000	No soreness, no hayfever
8/3/37	.18	1-40,000	No soreness, no hayfever

Patient had minimal symptoms on this dose for rest of season taken every five days.

This is a case showing very high sensitivity, given very small doses subcutaneously at frequent intervals making small increases if symptoms continued following last treatment.

They Practiced Medicine for Near a Century

By S. J. KELLY

Dr. Elijah Burton, his son and his grandson were physicians who practiced through 99 successive years in the neighborhood of Collamer. During a third of that time, father and son lived side by side west of Noble road on the south side of Euclid Avenue, then a road. For years they occupied the same office on the family lot. The grandson lived not far east and the combined practice of the trio extended from 1820 to 1919.

Dr. Elijah Burton was born in Manchester, Bennington County, Vermont, in 1793. Seeking a location in the west at the age of 27, he rode into East Cleveland, his saddlebags filled with medicine. Already he was a practitioner, married and the father of a child. Arriving in Euclid Township, later Collamer, with but a quarter in cash, he flipped a coin with another newcomer to decide who should teach in a proposed school. The doctor won, took the position and built the log school. During the one year of his teaching he fought the school bully and threw him into the burning logs of the fireplace.

Dr. Burton taught five days weekly, visiting patients out of school hours, and, after a night with a patient, it was not unusual for him to drop asleep while hearing lessons. He had attended lectures in Castleton, Vt., had practiced there and after further studies here, he devoted all his time to his profession. In 1821 he sent for his wife, Mary Hollister Burton, and their 4-year-old daughter, Lucy A. Burton. Mrs. Burton, gentle and delicate, sang in the village choir, as did her daughter. The mother lived only six years after coming west and was buried in the old church cemetery once at the corner of E. 105th Street and Euclid Avenue. Lucy Burton married George Croghan Dodge, father of Samuel Douglas Dodge, now residing in Mentor.

Dr. Burton then married Abigail Hollister, sister of his first wife, who came to East Cleveland in 1824 as a girl of 19 and was called "Abby" by her friends. An only child of this marriage, Mary Burton, remained unmarried. The doctor became Colonel of the local militia and his "rides" to attend the sick now extended in a circuit of over 10 miles. In the summer of 1834, cholera prevailed in the region and Squire Job Doan was taken sick. Representative from the county, the previous June, he had been appointed postmaster of the new office at Doan's Corners. Dr. Burton attended him but Job Doan died on the morning of Sept. 20, 1834. The physician himself was seized with the disease and was violently sick for three days. He treated himself and as he recovered, his entire company marched to his home in military formation.

On a ride in the vicinity of Doan's Corners, after a birth it was discovered that there was no whisky for jollification and no receptacle to bring it in. The doctor took a pigskin bag from the cabin wall, sent it to the nearest source of supply and regaled assembled friends.

A leading Democrat, the young physician exercised a large influence on campaigns and was consulted on probable outcome of elections. In 1846 his son, Dr. E. D. Burton, became his associate in medical practice.

The two had an office in the common yard in which their homes stood. The son was 21 when he joined his father in the partnership which continued eight years until the death of the elder Burton in 1854. The latter was a man of native force and marked characteristics, and traditions long remained in the neighborhood of his energy and wit.

Mrs. Abby Burton lived many years in Collamer, dying July 9, 1889, at the age of 85. She had seen Euclid Avenue cleared of stumps, lived long in the time of plank roads and tollgates, witnessed the building of the "Dummy" line as a quick means of reaching Cleveland, and the Nickel Plate Railway was running trains through the hamlet during the last decade of her life.

Reprinted from Cleveland Plain Dealer, Oct. 21, 1940.

Unilateral Exophthalmos and Spinal Cord Compression in a Case of Multiple Myeloma

JOSEPH FLYNN, M.D., AND SEATON SAILER, M.D.

CASE 39591. A 68-year-old, married, white male, elevator operator, was admitted to the Neurological Service of the Cincinnati General Hospital, February 6, 1941. He complained of girdle pains originating in the lower back and radiating across the abdomen and down both legs. These pains began nine months previously and became increasingly severe. On admission, the attacks were of daily occurrence and recurred with varying intensity at intervals of several hours. There was frequent nausea and vomiting.

History: Six months preceding admission he noted diminution of vision in his right eye associated with a progressive bulging of the eyeball and ptosis of the eyelid. During this time he lost 40 pounds in weight and suffered from increasing general weakness, constipation and frequent retching. Four weeks before entry he was forced to stop work and remain in bed because of weakness in both his lower extremities. Several days later he sought relief at a private hospital where he remained for three weeks but because of financial reasons returned home before a diagnosis was made. Two weeks prior to admission he became incontinent of urine and feces and both his mental and physical state began to show rapid deterioration. He became confused and experienced hallucinations. In 1935, the patient was treated in the Out-Patient Dispensary for a serpiginous luetic skin eruption. His blood Kahn reaction was positive on three occasions and remained so despite vigorous anti-luetic therapy.

Physical Examination: The patient was a poorly nourished and developed white male of 68 years, quite restless and apprehensive, lying supinely in bed and unable to move his lower extremities. During examination he complained loudly of lancinating girdle pains. Temperature 100.4°$^{(r)}$. Pulse 88. Respirations 22. Blood pressure 142/72. The skin everywhere presented a waxy pallor; over the buttocks were several reddened and ulcerated areas. The diaphragms were elevated and their excursions limited bilaterally. A few moist rales were heard at the left lung base posteriorly. The only abnormality noted on cardiac examination was numerous extrasystoles. Abdominal distention was marked, a tympanitic note was elicited over the abdominal wall, and peristalsis was normally active. No masses, localized tenderness or enlarged viscera were noted. The right eye protruded markedly and the right eyelid drooped. There was no papilledema and only a moderate degree of retinal arteriosclerosis could be seen. Visual acuity was decreased in the right eye. There was virtually a complete paralysis of the lower extremities except for the ability to flex the knees slightly. No localized atrophy, tenderness or fibrillations were present and superficial and deep reflexes were equal and normally active. Very slight dorsiflexion of both great toes occurred on plantar stimulation. Sensory examination demonstrated hypesthesia and hypalgesia extending superiorly to D_{10} although failure of cooperation rendered examination difficult. The patient was incontinent of urine and feces.

Laboratory Data: Examination of the blood disclosed 4,260,000 red blood cells per c. mm., 11.0 grams hemoglobin, and a normal white blood cell count and differential smear. No abnormal cells were seen in the circulating blood. The urine contained a 3+ albumin but was negative for Bence-Jones protein. The stool yielded a positive benzidine but a negative guaiac test. The blood Kahn was negative and the blood urea nitrogen was 46 mg. per cent.

Roentgenological Data: Lateral films of the lumbo-dorsal spine showed definite destruction between thoracic vertebrae D_{10} and D_{11} with erosion of the vertebrae about that area. The anterior-inferior portion of D_{10} was destroyed and the body of D_{11} also. The interspace was narrowed. In the right femur was seen an area of decreased density which could have represented a metastatic process although it did not possess all the characteristics usually seen with such a lesion. A chest film showed some destruction of the right twelfth rib 5 cm. from the vertebral articulation. Gastro-enteric series was negative. Barium enema studies were not completely satisfactory due to lack of cooperation. A suspicious filling defect in the region of the hepatic flexure raised the possibility of this location being the primary site of the neoplasm.

Lumbar Puncture Data:

Date	Jan. 1941	Feb. 7, 1941	Feb. 13, 1941
Initial Pressure	—	150 mm.	40 mm.
Dynamics	Normal	Normal	No response
Color	Normal	Light yellow	Yellow
Pandy	Negative	3+	4+
Protein	45 mg.	100 mg.	1800 mg.
Chlorides	625 mg.	—	—
Sugar	65 mg.	57 mg.	—
W.B.C.	0	2	10
R.B.C.	0	104/c.mm.	600/c.mm.
Gold Curve	Negative	Negative	Negative
Wassermann	Negative	Negative	Negative

Hospital Course: During the subsequent week the patient's mental state cleared considerably but soon thereafter relapsed. His physical state was one of progressive deterioration. He required tidal drainage of the urinary bladder. Despite great care the decubitus ulcers continued to extend. Complete flaccid paraplegia was demonstrable one week after admission, the Achilles reflexes disappeared and the patellar reflexes became greatly reduced. Complete anesthesia existed upward to the tenth dorsal cutaneous segmental area. The abdominal and cremasteric reflexes disappeared while the plantar signs were equivocal. The temperature curve was both intermittently and irregularly elevated a degree or two Fahrenheit. Three weeks after admission neurological examinations revealed unequal pupils, the left being slightly larger than the right. Anesthesia extended to a point 2.5 cm. above the umbilicus while the flaccid paraplegia remained unaltered. Several days

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The authors represent respectively the Medical and Pathological Services of Cincinnati General Hospital.

This is the fourth of a series of "Case Records Presenting Clinical Problems," selected by Dr. R. S. Austin, Professor of Pathology, University of Cincinnati College of Medicine.

later the patient became disoriented and expired on his twenty-ninth hospital day.

Clinical Diagnosis: The clinical impression was malignant neoplasm, primary site unknown, probably in the gastro-enteric tract with metastases to the right twelfth rib, to the right orbit, to the left femur, and to the tenth and eleventh thoracic vertebrae, with transection of the cord due either to compression or to vascular occlusion.

Necropsy (N-41-123): Performed by Dr. R. J. McGann four hours after death.

Gross Examination: On removing the breast plate, well circumscribed, discrete intramedullary tumor nodules 2-3 cm. in diameter were found in both second, and the third left ribs, approximately 2 cm. lateral to the costo-chondral junction. On section these were grayish-pink, glistening and rather soft. The enveloping bony cortex of the ribs was thin and brittle but no fractures were noted. The bodies of the tenth and eleventh thoracic vertebrae were flattened and distorted. The anterior inferior portion of the former and almost the entire body of the latter were replaced by tumor tissue similar to that noted in the ribs. Portions of this tissue penetrated into the epidural space and formed large, oval plaques 2-3 mm. in thickness on the outer surface causing a wedge-like compression of the underlying spinal cord. A few enlarged lymph nodes lateral to the aorta immediately below the diaphragm presented soft tumor-like, grayish-pink cut surfaces. One 2-cm. node of like appearance indented the posterior surface of the mid-portion of the pancreas. Its contours contrasted sharply with the lobulated pancreatic substance.

On breaking through the right superior orbital plate, a large amount of firm, and some fresh blood coagulum was found mixed with the retro-orbital fat tissue displacing the eyeball anteriorly. Section through the coagulum revealed a small amount of grayish-pink soft tumor tissue near the center. At no point did this appear to encroach on the bony laminae comprising the borders of the orbital cavity nor was tumor tissue found in the adjacent paranasal sinuses.

Microscopic Examination: Sections taken from the ribs and vertebrae showed compact aggregates and broad sheets of cells of uniform structure replacing the normal marrow elements and destroying some of the bone spicules. These cells exhibited the typical plasma cell pattern with eccentrically placed nuclei, rather abundant lightly basophilic cytoplasm, and a cart wheel-like disposition of the condensed nuclear chromatin. The average cell measured about twice the diameter of a red blood cell with an occasional multinucleated larger form present. The stroma for the most part appeared scanty or absent as seen with ordinary staining methods. In a few zones within the vertebral bodies, however, dense bands of fibrous connective tissue supported string-like collections and small islets of plasma cells. Both old and recent hemorrhage was prominent in the tumor mass occupying the retro-orbital fat. The lymphoid architecture of the peripancreatic, and periaortic nodes was completely effaced by a diffuse plasma cell infiltration, which invaded the capsules and extended a short distance into the peri-nodal fat.

Sections taken through the lower thoracic segment of the spinal cord opposite the area of extradural compression showed marked degenerative changes with demyelinization and fragmentation and destruction of the axis-cylinders of the white matter. The ganglion cells within the gray matter were reduced in number and those remaining acutely degenerated. Slight inflammatory cell changes were present in the leptomeninges and degenerative lesions were noted above and below the principle focus of cord damage. Sections through the cerebral cortex showed a mild degree of encephalopathy. In addition, microscopic examination of the remaining organs revealed foci of both acute and chronic inflammation in the mucosa of the lower esophagus and the stomach. The urinary bladder presented a severe acute and chronic inflammatory reaction and active inflammatory changes were noted bilaterally in kidney medullae and cortices. A small subcortical myoma was present in one kidney.

The final pathological diagnoses were: Plasma cell myeloma of the ribs and lumbar vertebrae with extension to the spinal dura and metastases to the peripancreatic and periaortic lymph nodes and the retrobulbar fat tissue; myelomalacia due to extradural compression of the spinal cord; active chronic cystitis and bilateral pyelonephritis; acute and chronic esophagitis; acute and chronic gastritis; subcapsular myoma of one kidney; pulmonary emphysema; atherosclerosis of the aorta.

DISCUSSION

While little doubt existed that the process in the ribs, femur, vertebral column and right orbit was neoplastic in nature, the localization and character of the primary lesion remained obscure. Attention was directed to the gastro-enteric tract because of the story of abdominal discomfort, nausea, vomiting, increasing constipation and loss of weight. The marked abdominal distention present on admission and the inconclusive roentgenological evidence enhanced this suspicion. Against this assumption was the rarity with which gastro-enteric neoplasms, and gastric carcinomas in particular, metastasize to the bony skeleton. The prostate and thyroid glands, common sources of malignant tumors forming bone metastases, seemed absolved of responsibility as far as palpation could determine.

The absence of Bence-Jones bodies in the urine of the patient appears of little significance and has been found wanting in 35 per cent of a large series of cases. In addition, various other metastatic neoplasms of bone, certain blood dyscrasias, and disseminated tuberculous lesions of the skeleton have been reported exhibiting Bence-Jones proteinuria.

Not the least interesting feature of this case was the neurological aspect. The initial severe low back pain was probably caused by periosteal erosion while the later root-like distribution and associated nausea and vomiting appears the result of pressure on the emerging nerve trunks. The onset of paraplegia was a gradual progressive affair due to vascular interference rather than direct compression. This conclusion is justifiable in view of the initial normal cerebrospinal fluid pressure coexistent with total paraplegia. The localization of the spinal lesion at the tenth dorsal segment is not an uncommon site for transection. At this level a large nutrient artery enters the anterior root to anastomose with branches entering at D_5 and L_2 to form a considerable portion of the anterior spinal artery. The terminal cerebrospinal fluid block coincided with invasion of the subarachnoid space by the infiltrating neoplasm. The subsequent increase of tumor growth readily explains the extensive softening found on examination of the cord. It is interesting to note, however, that spinal cord signs and symptoms have been described in cases of multiple myeloma unassociated with direct pressure from the adjacent tumor and have been attributed to the toxic effect of the tumor itself.

The vertebral form of multiple myeloma is apparently not so rare as earlier observers believed and clinically the initial and persisting symptoms may be confined solely to the spinal cord. The age of onset is ordinarily in the fifth or sixth decade of life, and the thoracic cord is the region usually involved with signs of a transverse spinal lesion. Focal spinal tenderness has been described and bone destruction may or may not be visualized on X-ray examination. Laminectomy determines the presence of a soft reddish-gray extra-dural growth which can be traced frequently to the involved vertebral body. Beneficial results have been obtained by removal of the tumor and subsequent X-ray therapy. In the case of a solitary myeloma of bone the prognosis appears particularly encouraging.

The microscopic appearance of the tumor in this case afforded little diagnostic difficulty and presented a uniform pattern of the characteristic plasma cell type. The lesion encountered in the retro-orbital fat tissue causing exophthalmos was associated with considerable old and recent hemorrhage. The adjacent bony framework of the orbital cavity, however, was uninvolved in the tumor process as was the skull elsewhere. Such a lesion must be regarded as a true metastasis, and its location in this site is unusual.

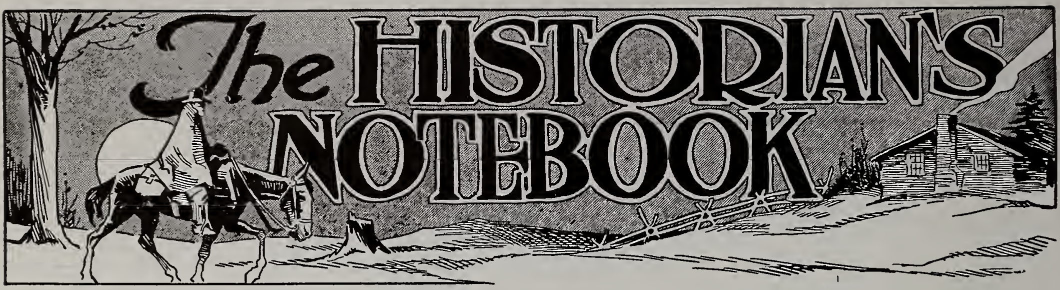
Arterial Hypertension

The hypertension associated with edema such as that occurring in acute glomerulonephritis, interstitial nephritis and glomerulonephrosis of toxemia of pregnancy should be differentiated from the hypertension of chronic Bright's disease without edema.

In acute Bright's disease the hypertension is usually associated with cerebral symptoms and with hard (nephritic) edema. Sodium restriction improves the symptoms and the edema, and reduces this type of hypertension; while conversely free administration of sodium chloride or of soda accentuates the hypertension and aggravates the symptoms. Indeed convulsions, which are often serious or fatal, can result from indiscriminate use of sodium salts in the presence of this type of hypertension. Even if some urinary retention is present, these seizures do not represent true uremia, but they do represent special types of encephalopathy. A low sodium diet given to such patients should contain 1500 calories, 1500 to 2000 cc. of fluids, 40 to 60 gm. of protein, 160 gm. of carbohydrate and 80 gm. of fat.

Low sodium diet, on the other hand, exerts no beneficial effect in the hypertension of chronic Bright's disease regardless of whether that hypertension is caused by nephrosclerosis, glomerulonephritis or pyelonephritis. The prolonged use of low sodium or "salt free" diet, which is still practiced by some physicians, is not indicated and is not practical for any length of time, for often it weakens the patient. That there is no evident simple correlation between the usual types of chronic hypertension and sodium chloride intake is further demonstrated by the fact that hypertensive patients who use salts excessively do not develop an increase in blood pressure of accentuation of symptoms.

Rigid diets in patients with hypertension are still in vogue, particularly in Europe. In Germany periodic fasting of from 5 to 10 days duration, followed by a gradual return to a low sodium diet, has been advocated recently. Studies and clinical experience fail, however, to confirm the claim that under-nutrition with calorigenic food stuffs is more than symptomatically beneficial in chronic hypertension without renal failure. It is not what, but how much the patient eats that is important in uncomplicated hypertension. Kampmann of Germany stated recently that the combination of rigid salt free diet with periodic fasting of about eight days duration has yielded better therapeutic results than any of the numerous other methods of treatment used in the Volhard Clinic. On this regime during fasting usually about 750 cc. of fruit juices or tomato juice are given daily. One cup of tea or small amount of fresh fruit or salad may be added. No other fluids are allowed. In addition the initiation of such a diet is preceded by a saline laxative. The patient is usually not kept in bed, and walking exercise is allowed. Following the strict fasting period the patient generally, in three days, returns to the salt free diet. During this transition period potato, vegetables, salads and applesauce are added to the diet. Depression, nervousness, and weakness have developed in some of the fasting patients. It is advocated that the diet be strictly supervised in old persons. In presence of severe heart failure and particularly in myocardial infarction the diet is contraindicated. The fact that there has developed in some patients increased tendency to collapse indicates that this dietary restriction is severe enough to disturb considerably vital bodily functions. There must be also considerable dehydration during fasting. I have had no experience with this drastic therapeutic procedure.—Soma Weiss, M.D., Boston; Conn. S.M. Jr., Vol. V, No. 7, July, 1941.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

The Beginning of Medical Organization and Medical Practice at Warren, Ohio[1]

JAMES J. TYLER, M.D., WARREN, OHIO

(Continued from July issue)

AFTER a further inspection of the relics and photographs, a copy of the *Western Reserve Chronicle* of July 1st, 1885, was placed in the box. . . . The box was placed in the niche and the stone laid over it in style." In the east wall of the Warren Public Library is a beautiful colored glass window originally in the Julian Harmon residence. The greater portion of the window depicts Sarah Dana Harmon seated at her spinning wheel, while in an upper, smaller section is a faithful reproduction of the cottage built by Dr. John B. Harmon in 1816.

THE HARMON OFFICE

At an early date Dr. John B. Harmon built an office just east of his frame house. This continued to be used as his office throughout his life. Dr. Julian Harmon enlarged the building and also used it as his office until the Spring of 1897, when he moved into the Lamb & Strong Block, on Market Street. In the following year he retired from active practice and his library and office equipment was purchased by Dr. Daniel G. Simpson (1881-1938), who in that year began practice in Warren. When Dr. Julian Harmon built his new residence in 1885, the office building was moved to the rear of the lot, but still faced upon the Public Square. Later it was moved to its present location on Harmon Street, and was used as a dwelling for some years, before Miss Olive Harmon had it enlarged and remodeled into the present charming cottage in which she now lives. Her grandfather's desk and other mementos of her father and grandfather are among its furnishings. In this building many of the early district and county medical society meetings were held.

VILLAGE LIBRARY ESTABLISHED IN THE HARMON OFFICE, 1877

Soon after coming to their new homes in the West, the pioneer settlers organized the "Trumbull Library" consisting of about one thousand volumes. In 1848 the books were given to the Warren Library Association organized at that time by Dr. Julian Harmon and others. It was closed in 1854 and some two thousand books sold at auction. In 1877 Dr. Harmon and Prof. E. F. Moulton revived the old Association, gathered together a small book collection and established a library in the office of Dr. Harmon. This was a subscription library, membership being one dollar a year. Prof. Moulton was president of the Association and Dr. Harmon secretary and librarian. This organization continued until 1888, when the present Warren Library Association was organized. The Warren Public Library now contains some fifty thousand volumes.[41]

HARMON COLLECTION IN THE MUSEUM OF THE CLEVELAND MEDICAL LIBRARY ASSOCIATION, CLEVELAND, OHIO

Considerable material belonging to Dr. John Brown Harmon and Dr. Julian Harmon has been placed in the Museum of Historical and Cultural Medicine of the Cleveland Medical Library Association. To this material Miss Olive Harmon has recently added the 1818 diploma of her grandfather. Dr. Howard Dittrick, Director of the Museum, states[42] that "the Harmon collection consists of saddle-bags, crotchet, Smellie forceps, obstetrical forceps, autopsy instruments, tooth drawers, oblique cutting scarificator, hernia knife, Goeltsch ear mirror, otoscope, cupping instruments, trephining instruments, amputation instruments and eye instruments." It is interesting to note that the obstetric forceps were devised and forged in a local blacksmith shop.[43] To this collection Mrs. D. G. Simpson has very recently added the Harmon bookcases and Dr. Julian Harmon library, which came into the possession of her husband, in 1898.

At Warren, the old county seat of the Western

Reserve, were held many of the early district medical meetings. The pioneer physicians who assembled there were men of sterling character and it is well that their names should not be forgotten.

NOTES AND REFERENCES

1. A paper read at the Annual Meeting of the Trumbull County Medical Society, Warren, Ohio, December 18, 1940, to which additional material has been supplemented.

2. The first law relative to medical practice in Ohio became effective January 14, 1811. The state was then divided into five medical districts. Trumbull County was included in the Fifth District with Jefferson, Belmont, Columbiana, Stark, Geauga, Portage, Ashtabula, Cuyahoga, and Huron. Steubenville was designated as the meeting place for the district. The names of the district censors were: George Wilson, John McDowell, and Thomas Campbell.

3. Northeastern Ohio is still known as the Connecticut or Western Reserve. In relinquishing her claim to western land following the Revolutionary War, Connecticut in 1786, reserved a tract from the cession to the national government. It contained about three and one-half million acres and was bounded on the south by the forty-first parallel, and extended along the southern shore of Lake Erie from the west line of Pennsylvania on the east to the Bay of Sandusky on the west, a distance of one hundred and twenty miles. Today, fourteen of Ohio's eighty-eight counties lie wholly or in part within the Western Reserve.

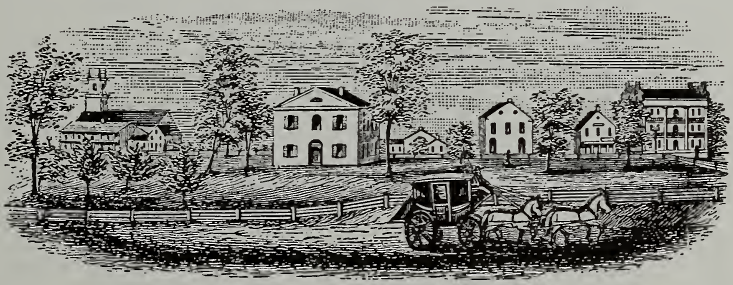
4. Dr. David Long (1787-1851) was born in Hebron, New York, and settled in Cleveland in 1810, as its first physician. In 1824 he served as president of the Nineteenth District Medical Society—"Pioneer Medicine in the Western Reserve" by Howard Dittrick, M.D., et al., Cleveland, Ohio, 1932, pp. 15-21.

5. Dr. Shadrach Bostwick (1769-1837) was born in Maryland; moved to Massachusetts, and in 1803 to Deerfield, Portage County. In 1807 he removed to Canfield, then in Trumbull County and now in Mahoning County, where he lived until his death. In the *Western Reserve Chronicle*, November 20, 1817, appears the following notice: "CANCERS. Dr. Davison's remedy, so highly celebrated for curing CANCERS and SCROPHULA. The knowledge of preparing and applying this medicine was recently purchased by Dr. E. Gidney of Middlebury, Conn., who (by the interposition of Rev. Roger Searle, late of Plymouth) has transmitted an agency of its practice, for the benefit of this country; to the subscriber, living in Canfield, Ohio. It is confidently stated that this remedy possetheth a power of exterpating Cancers, and without any danger, or causing but very trifling pain to the patient. Those unfortunate sufferers who may desire its benefits, may be supplied by calling on DR. SHADRACH BOSTWICK."

6. Dr. Charles Dutton (1777-1843) came to Youngstown, Ohio, in 1801. He was born in Wallingford, Connecticut, and studied medicine with Dr. Jared Potter, grandfather of Dr. Jared Potter Kirtland.

7. Dr. Peter Allen (1787-1864) of Kinsman, Ohio, was one of the best known of the pioneer physicians of the state. He was president of the first "Medical Convention of Ohio", held at Columbus, January 5-7, 1835, and was again president of "The Ohio State Medical Society", in 1856.

8. Dr. Joseph DeWolf (1787-1869) was the son of Joseph DeWolf, a Revolutionary soldier who came from Granby, Connecticut, and settled in Vernon Township, Trumbull County, in 1779. He married Unice Goodrich and practiced in Ravenna, Portage County.



Pubic Square and Court House, Warren, Ohio, 1846

9. *Ohio State Medical Journal,* V. 37, No. 3, March, 1941, p. 259.

10. Dr. Daniel Upson (1786-1863) was born in Southington, Connecticut, and located at Hartford, Trumbull County; removed to Worthington, Franklin County, in 1818, where he served several terms in the state legislature; in 1832 he removed to Tallmadge, Portage County, relinquishing his practice and engaging in farming and coal mining. In 1836-37 he served as state senator from Portage County and was active in the erection of the new county of Summit.

11. Dr. Jeremiah Wilcox (1760-1823) was a Revolutionary soldier. He came from Hartland, Connecticut, in 1799, and settled at Vernon, Trumbull County, in 1802. His son, Dr. Jeremiah Cullen Wilcox (1790-1873) settled on a large farm in Richland, Summit County, in 1839 and resided there until his death. Dr. Dudley Peter Allen in an article published in the *Magazine of Western History*, Vol. III (1885-86) writes that his father, Dr. Peter Allen, settled in Kinsman, Trumbull County, in 1808 and that "the first physician in this vicinity, Dr. Amos Wright, had already removed to Tallmadge, Ohio, and Dr. Jeremiah Wilcox was advanced in years, so that in a short time, in the absence of neighboring physicians, Dr. Allen rode over a large territory."

12. Dr. Orestes K. Hawley (1780-1847) was born in Farmington, Connecticut, and came to Austinburg, Ashtabula County, in 1800. He was

the delegate of the Twentieth Medical District to the convention of the General Medical Society held at Columbus, January 5, 1829.

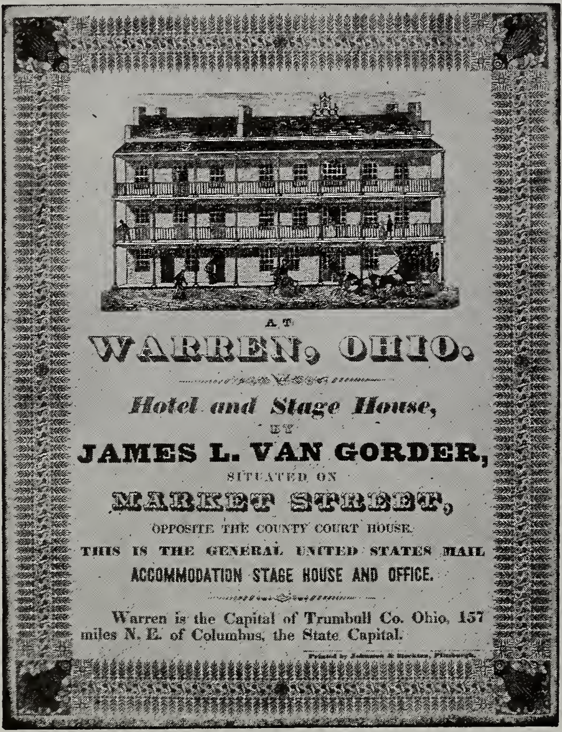
13. Dr. Lyman Fay, a native of Barnard, Vermont, moved to Milan Township, Huron County (present Erie County), in 1815. In 1823 he moved to Milan village, where he died in 1854. He was active in the Fourteenth District Medical Society after its organization in 1824.

14. Dr. Henry Manning (1787-1869) was born at Lebanon, Connecticut, and had as preceptors Dr. Hutchinson, of Lebanon, and Dr. Joseph White, of Cherry Valley, New York. He settled in Youngstown in 1811, where Dr. Charles Dutton had begun practice in 1801. See "A Successful Medical Career on the Western Reserve," by S. M. McCurdy, M.D., *Ohio State Medical Journal*, V. 32, No. 9, September, 1936, pp. 955-58.

15. Dr. Isaac Swift (1790 - 1874) was born in Litchfield, Connecticut, and came to Ravenna, Portage County, in 1815, where he practiced for many years. He served as county treasurer, 1824 - 32 and as associate judge of the Court of Common Pleas in 1846.

16. Dr. Asahel Brainard practiced at Orangeville, Hartford Township, Trumbull County, where he died in 1881. He was a son of Asahel Brainard, who came into township in 1799.

17. Dr. William Heaton commenced practice in Warren in 1819. He was the son of Isaac Heaton, of Howland Township, Trumbull Co. Dr. Heaton married Elizabeth Quinby, daughter of Ephraim Quinby, who founded the town of Warren.



AT

WARREN, OHIO.

Hotel and Stage House,

BY

JAMES L. VAN GORDER,

SITUATED ON

MARKET STREET,

OPPOSITE THE COUNTY COURT HOUSE.

THIS IS THE GENERAL UNITED STATES MAIL

ACCOMMODATION STAGE HOUSE AND OFFICE.

Warren is the Capital of Trumbull Co. Ohio, 157 miles N. E. of Columbus, the State Capital.

Printed by Johnston & Stockton, Pittsburgh.

Cotgreave Tavern later known as Van Gorder Hotel, Warren, Ohio.

18. Dr. Tracey Bronson (1791-1859) was born in Middlebury, Connecticut; graduated from the medical department of Yale College in 1813; settled in Newton Township, Trumbull County, in 1814; served as state representative in 1836-37-38. His residence in Newton Township is still standing.

19. Dr. Benjamin Palmer came from New Hampshire and established a successful practice in Mesopotamia Township, Trumbull County. Prior to his settlement in Mesopotamia in 1824, he practiced for a few years near Painesville, Ohio. Dr. J. C. Hubbard states in an article, "Medical Pioneers and Pioneer Medicine" (*"History of Geauga and Lake Counties"*, by William Brothers, 1878, p. 32), that Dr. John H. Mathews was also a member of the Sixth District Medical Society. Dr. Mathews (1785-1862) was the first physician practicing in the territory now included in Geauga and Lake counties. He was born at Hoosac, New York, and began practice at Painesville in 1808-09. He married Martha D. Huntington, daughter of Governor Samuel Huntington.

20. Dr. Charles C. Cook (1799-1863) was born in Wallingford, Connecticut. He was a nephew of Dr. Charles Dutton and studied medicine with Dr. Eli Ives, of New Haven, Connecticut; graduated from the medical department of Yale College in 1822. He settled in Youngstown in 1824.

21. Dr. Elijah Flower (1782-1839) was born in Burlington, Connecticut, and came to Ohio in 1813. He settled at Brookfield, Trumbull County, and resided there until his death. He was one of the preceptors of Dr. Theodatus Garlick (1805 - 1884), who married his daughter, Amanda.

22. Dr. Joseph Truesdale (1804-1871) was a son of John Truesdale, who removed from Washington County, Pennsylvania, and settled at Poland Township (present Mahoning County.) He was a graduate of the Ohio Medical College, in Cincinnati, and succeeded Dr. Jared Potter Kirtland in the practice of his profession in Poland village. He was a member of the state legislature, 1846-47 and 1856-57.

23. *Ohio State Medical Journal*, V. 34, No. 6, June, 1938, pp. 681-2.

24. Dr. Calvin Pease, Jr., was a son of Judge Calvin and Laura G. (Risley) Pease, of Warren. Judge Pease served as a member of the Supreme Court of Ohio, 1802-10.

25. Dr. Sylvanus Seeley (1795-1849) read medicine with his father, Dr. John W. Seeley, in Howland Township, Trumbull County. At the age of seventeen, he served as surgeon's mate to Dr. John B. Harmon and was present at the attack on Port Mackinac.

26. In 1787, Samuel Holden Parsons (1737-1789), one of the three judges of the Northwest Territory, purchased from the General Assembly of the State of Connecticut, 25,000 acres at the Salt Springs on the Mahoning River. Three years later, while on a visit to the Springs, General Parsons found a man with a broken leg whom he appears to have been assisting to reach the Big Beaver Block House (New Brighton. Pa.), where he could be properly cared for. The journey was made in a canoe as a more comfortable means of carriage. While running the rapids of the Beaver River (Beaver Falls, Pa.), his canoe was wrecked upon the rocks and both

he and the man were drowned, November 17, 1789.

27. "*History of Trumbull and Mahoning Counties*", by H. Z. Williams & Bros., 1882, Vol. I, pp. 313-23.

28. "Dr. John B. Harmon", by Seeleye A Wilson, *Magazine of Western History*, V. IV, 1886, p. 63.

29. "Pioneer Medicine on the Western Reserve", by Dr. Dudley Peter Allen, *Magazine of Western History*, V. III, 1885-6, p. 279.

30. Willson, ibid, p. 63-64.

31. Judge George Tod (1773-1841) was born in Suffield, Connecticut; graduated at Yale College in 1795; attended the law school of Judge Tappan Reeves in Litchfield; came to Youngstown, Ohio, in 1800; state senator 1804-05 and 1810-11; in 1806 elected judge of the Supreme Court of Ohio, which office he held for five years; served as major and colonel in War of 1812; in 1815 elected judge of the Court of Common Pleas, having for his district, the whole northern part of the State, and held this office until 1829; afterwards practiced law and devoted his attention to his farm, at Brier Hill in Youngstown Township; the farm afterwards became noted for its deposits of fine mineral coal, developed by his son, Governor David Tod.

32. "Williams vs. Hawley", in "Travails of Pioneer Physicians", by Donald D. Shira, M.D, *Ohio State Medical Journal*, V. 34, No. 3, March, 1938, p. 311.

33. H. Z. Williams & Bro., ibid, p. 319.

34. Willson, ibid, p. 65.

35. In the State Capitol at Columbus are portraits of four judges of the Supreme Court: George Tod, Matthew Burchard, Milton Sutliff, Rufus P. Ranney, and a portrait of Gov. David Tod, painted by John Claude Crawford (1838-1879), Warren's first artist.

36. "Interesting Letter from Dr. Julian Harmon", *Western Reserve Chronicle*, May 14, 1862, and May 21, 1862.

37. *Warren Daily Chronicle*, July 1, 1903.

38. *Western Reserve Chronicle*, Warren, Ohio, July 6, 1885, "Days of Yore—Recalling Events of Fifty Years Ago". The remarks of Dr. Julian Harmon at the laying of the corner-stone of his new residence at the corner of High and Harmon streets, July 3, 1885. On the same site the corner-stone of the present Y.M.C.A. building was laid in 1928.

39. "In its first thirty-five years the settlement of Warren had no political identity apart from the township and aside from being the county seat. The first Charter Election was held at the Court House, April 1, 1834. George Parsons was elected Mayor. Warren became a village in 1852, a city in 1869."—Elizabeth J. Hauser, *Warren Tribune Chronicle*, July 1, 1938.

40. Francis Freeman (1779-1855) was born in Duchess County, New York. He came to the Reserve and settled at Braceville, Trumbull County. In 1804 he located permanently at Warren. He was treasurer of Trumbull County for a number of years and was also associate judge for seven years.

41. "Annual Report of the Warren Public Library", Fiftieth Annual Meeting, January 10, 1939; The Early Years, 1814-1888; A Half Century of Progress, 1888-1938.

42. Communication received from Dr. Howard Dittrick, Cleveland, Ohio, March 15, 1941.

43. "The Equipment, Instruments and Drugs of Pioneer Physicians of Ohio", by Howard Dittrick, M.D., *The Ohio State Arch. & Hist. Quarterly*, Vol. XLVIII, No. 3, July, 1939, p. 205, also "Collections of the Museum of Historical and Cultural Medicine of the Cleveland Medical Library Association, by Dr. Howard Dittrick, Director, *Bulletin of the History of Medicine*, Vol. VIII, No. 8, October, 1940, p. 1216.

Treatment With Thiocyanate

Because of the wide variation in the oral dose levels that are given to achieve the same blood concentration of thiocyanate, it would seem imperative that no patients be put on thiocyanate unless there are adequate blood studies. Because this laboratory work is time consuming, the need for proper selection of cases is obvious.

In the first two weeks of treatment, even with low blood concentrations, the patients sometimes notice considerable fatigue and sometimes feel worse rather than better. These symptoms clear as treatment is continued and in my experience have no relation to helping to anticipate which patient will have a satisfactory response to treatment and which will not.

An exanthematous eruption which resembles German measles sometimes develops in the first weeks of treatment. If thiocyanate is discontinued the rash promptly disappears and, in my experience, does not recur if treatment is started again. This likewise has no relation to the type of response to be expected in the treatment.

There are two salutary responses that one may expect in this type of treatment, decrease of blood pressure and symptomatic improvement. They both may occur in the same patient but they are by no means closely correlated as any patient may have the one without the other.

For the highest percentage of favorable responses in thiocyanate medication it is suggested that one select patients in the so-called "essential" phase of their hypertension with symptoms referable to this condition such as headaches, vertigo, dyspnea and emotional instability.—Wayne L. Ritter, M.D., Indianapolis; Jour. Mo. S.M.A., Vol. 38, No. 7, July, 1941.

Chilblains

In locations where children spend long hours skiing or skating, chilblains occasionally occur and may be painful and keep the victims from sleeping. One coat of tannic acid and alcohol usually takes all the pain away. Our method is to apply one or two coats, give the patient a bottle of the mixture to take home and apply when necessary. He never has to call on us again for help for that ailment.—Ralph T. Richards, M.D., Salt Lake City; Rocky Mountain Medical Jour., Vol. 38, No. 7, July, 1941.

Dissecting the Doctor's Diction

R. S. AUSTIN, M.D.

MISUSE of words is by no means peculiar to the medical profession. For some strange reason an efficiency loving people, such as Americans apparently are, largely fail to appreciate that careful use of language is one of the best ways of promoting their material and intellectual interests. It frequently is not entirely ignorance that causes an improper use of words but often just carelessness, together at times with a dislike for appearing superior—the "low-brow pose".

The physician perhaps might be thought to be somewhat protected against lapses from correct use of words because his training has emphasized the necessity for accuracy. For example, therapy demands the proper choice of a drug in correct dosage. Yet when it comes to conversation or clinical records, proper choice of words is too often neglected. Like his non-medical fellow citizens the doctor of medicine slips into the slipshod practices of sloppy diction which characterize the current social scene. That apathy toward the situation is largely responsible for it is evidenced by the far more careful choice of words in published articles on medical subjects, although in part credit here may be given to editors and proofreaders.

There are, of course, various degrees of crime against words. Some are only mild misdemeanors, others are of more serious character even to the extent of being frankly murderous. It is really unkind and even unfair to a word to make it serve in a capacity for which it is not fitted. To be sure the language is always developing, growing and changing, and good use of words is not the same today as it was yesterday or will be tomorrow, but the new uses of words that become definitely established are those which are needed because of the previous inadequacies of thought expression. They are not the thoughtlessly repeated words that someone has initiated just because they came into his uncritical mind while at the same time more accurate words were available to perform more effectively.

Beginning with the very minor sins of physicians against linguistic accuracy there may be cited the common use of the term "gastrointestinal" (as in "G.-I.-Series"). It is interesting that the specialists in this field when naming their societies use the word "gastro-enterologists".

Rather worse is the forcing of nouns to do duty as verbs. Certainly the English language has increased its flexibility and usefulness by a great many instances of this very metamorphosis of parts of speech but transitions of this kind have become established in good usage only when they have met a genuine need for simpler or more effective expression of ideas. On this score can the use of the word "hemorrhage" as a verb be justified? As an intransitive verb it is enough of a shock to the conservative employer of words, but in a transitive form ("the patient hemorrhaged a pint of blood") it becomes quite remarkable. It meets no evident need and, furthermore, in the past tense it is awkward. Awkward words rarely make a place for themselves.

An extreme and violent example of this coercion of nouns occurred in a recent clinical-pathological conference when a resident in medicine referred to the "Cheyne-Stoking" of a patient.

Then there is a careless tendency sometimes manifested of mistreating nouns in another fashion. A noun indicating a quality is forcibly and entirely unjustifiably made to serve as a noun denoting an object. This is not only quite gratuitous but makes for confusion of understanding. To be sure a cynic has remarked that language has two purposes, to reveal and to confuse thought, but certainly in scientific circles, the latter purpose is to be ignored. One of the outstanding examples of improper use of nouns as such in medical parlance is the word "malignancy", meaning an object (tumor or neoplasm) whereas it really refers solely to a quality or condition. It may be that no great harm is done by such a misuse of words but it does promote hazy thinking, which does not help the development of the precision of thought needed in attacking medical problems. Let it be added that this perhaps minor crime against language is not confined to conversation and clinical records but appears in many a published article. It is a kind of medical slang. Some slang words become accepted as proper speech; it may be that this careless use of a word may find its way into the dictionaries. Purists in diction have

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Note—One of a series of medical literary essays written at the request of The Editor.

to be prepared for the ultimate acceptance of illogicalities.

Less defense can be assembled for "temperature" as a synonym for "fever". Can the laity be blamed for making this mistake when it drops from the lips of doctors and nurses? Where, indeed, would a luckless human being be "without a temperature"?

The literal picture conjured up in the mind of a dispassionate listener by some of the commonly used medical phrases must be rather amusing. "Acute belly", for instance. One has to leave the mammalian group and get down to the insects before this term can be applied with strict linguistic accuracy. The term means something to surgeons and their associates, but is it of any real help to understanding? Then there is "benign prostate". To the layman, with a smattering of anatomic knowledge, what picture does this bring up in his mind—an organ situated at the heart of male matters of anatomic and physiologic importance, exerting a most beneficent control over affairs, even bending a kindly glance over the other members of the genital system. The term simply implies "non-neoplastic", so why not say so, directly and non-euphemistically? But conversational medicine, like other departments of conversation, tends to the euphemistic and slovenly mode of expression.

Well, every group of people engaged in tilling the soil of some field of human interest is bound to develop its slang and its jargon. Nevertheless it would seem fitting for the better prosecution of desirable ends, for themselves and their public, that physicians divorce entomology from etymology—get the "bugs" out of their speech.

Malignant Ulcers

Malignant ulcers, the ulcers in which tumefaction is not apparent either macroscopically or roentgenoscopically, can in most instances be distinguished from benign ulcers, although with varying degrees of positiveness. Any ulcer in which the diameter of the crater exceeds 2.5 cm. should be strongly suspected as being malignant for exceptions are rare. Smaller malignant ulcers have to be identified on the basis of other criteria such as irregularity of the margin or base of the crater, effacement of neighboring rugae, diminished peristaltic activity and absence of gastrospasm and of localized tenderness to pressure. In contrast, benign ulcers are usually characterized by smooth regularity of the contour of the crater, accentuation and convergence of neighboring rugae, active peristalsis, spastic manifestations and definite tenderness to pressure. But from 10 to 15 per cent of ulcers that bear no roentgenologic marks of malignancy prove, nevertheless, to be malignant when examined microscopically. It follows, therefore, that a roentgenologic diagnosis of "gastric ulcer," although it implies that the lesion probably is benign, should never be construed as being an assertion that malignancy definitely can be excluded.—B. R. Kirklin, M.D., Rochester; Jour. Mo. S.M.A., Vol. 38, No. 7, July, 1941.

In Defense of a Bad Temper

Cannon, the eminent physiologist of Harvard, has shown how closely the emotions are associated with the secretions of the endocrine glands. The effects of impulses conveyed by the sympathetic nerves from emotions are continued through the endocrine system. Following this action of the sympathetic nerves the adrenal glands discharge a secretion which, among other things, releases from the liver glycogen, a reserve form of carbohydrate. If this is succeeded by marked physical or mental activity the excess carbohydrate in the blood may be burned up; but if not, it is often excreted through the kidneys, and sugar and even albumin may appear in the urine. Thus a bad temper can furnish the necessary additional fuel for unusual physical or mental effort.

It is well known that when anyone is overworked or tired he tends to be irritable. This is doubtless a defense mechanism. If, for instance, at the end of a trying day some unexpected task turns up or some undesired visitor or agent presents himself one often becomes fractious. A tired or exhausted person should be let alone under such circumstances, because of the liability to the display of bad temper. If he were fresh and rested he might be more genial and cooperative. To impose an extra task or a disagreeable person or problem on one who is already tired means greater exhaustion and a still heavier drain upon his mental and physical resources. The exhibition of a bad temper under these circumstances is distinctly protective.

The justification of a bad temper may not be overwhelmingly proved, but there are many suggestive incidents which show that it is not always reprehensible. The bad temperish characteristics of Dr. Samuel Johnson, the lexicographer, and of Carlyle, are notorious, and as a result many a quip from them has been recorded. Johnson was once criticized by a lady for his erroneous definition of the pastern joint of a horse. She asked him why he committed such an error, and he peevishly replied, "Just ignorance, Madam, pure ignorance." Definitions are tricky things, and doubtless require a careful selection of words and an even temperament. Johnson must have been irritated, a not unusual condition for him, when he defined network as "something reticulated and decussated with interstices between its intersections." Surely no one in a placid mood could have inflicted such a thing upon us!—J. Shelton Horsley, M.D., Richmond; Va. Med. Monthly, Vol. 68, No. 7, July, 1941.

Digests of Important Medical and Health Laws Enacted At Recent Regular Session of the Ohio General Assembly; Should Be Preserved for Ready Reference

AT the recent regular session of the Ohio General Assembly, a number of laws of direct interest to the physician in private practice and other measures affecting public health or of general interest to the medical profession were enacted.

To familiarize readers of *The Journal* with the important provisions of these new laws and with important changes made in existing laws, the following digests have been prepared.

Physicians who may desire the complete text of any law referred to may obtain a copy by writing directly to the office of the Secretary of State, State House, Columbus.

It is hoped that the following digests will be read carefully as every physician should keep himself posted on all laws imposing legal obligations on members of the medical profession or dealing in a general way with health questions.

No review of House Bill 51, the enabling act for medical service plans, which becomes a law on August 5, is included in this article as that law has been discussed and analyzed in previous issues of *The Journal.*

FOUR LAWS AFFECTING HEALTH ADMINISTRATION ENACTED

Four measures passed by the General Assembly and which were approved by the Governor deal primarily with local public health administration.

Senate Bill 122, which becomes effective September 4, amends Section 486-19 of the General Code, to provide that employees of a city health district shall be included under municipal civil service. One part of the revised section provides that "present employees of city health districts and city health departments shall continue to hold their positions until removed in accordance with the civil service laws".

A law which will become effective on September 4 and known as **Senate Bill 301** permits any city operating under charter to continue the form of health organization in effect on September 4. This proposal was actively backed by the Cleveland delegation in the General Assembly to meet a situation existing in that city. For years Cleveland has not had a board of health but has had a health division operating as a part of the City Welfare Department. Some months ago the Ohio Supreme Court in interpreting Section 4404 of the General Code, held that every city must have a board of health. Senate Bill 301 amends that section in such a way that a charter city which has been administering public health without a board of health may continue with its present administrative set-up. The provision, however, does not apply to unchartered cities and it does not permit charter cities which do have a board of health to change from that system after Septemeber 4.

Section 7693 of the General Code which authorizes boards of education to pay a school physician or school dentist, was amended through the enactment of **House Bill 45**, effective September 4, to permit a board of education to pay the board of health of a general health district for such services when furnished by physicians or dentists employed by the board of health. The old law provided that compensation shall be paid direct to the persons employed either by the board of education or board of health. Financial transactions involved in this activity will be greatly simplified under the new law.

House Bill 406, which becomes a law on September 5, amends Section 1261-17 of the General Code to provide that members of general district boards of health shall be paid a per diem and mileage when attending a meeting of the board. The per diem is set at $3.00 and the mileage is five cents per mile to and from the place of meeting. The law stipulates that these amounts will not be paid for more than 12 meetings in any one year.

EXTENSIVE CHANGES MADE IN VITAL STATISTICS LAWS

One of the most important enactments of the 94th General Assembly was the measure—**House Bill 101**—recodifying the Vital Statistics Laws of Ohio. This bill was passed as an emergency measure and became effective April 30. In addition to recodifying the existing statutes, **House Bill 101** contained some new features, the most important of which are: Provision for registration of adoptions and foundlings; for corrections of birth and death records; for establishing a birth record, and for issuance of a "certification of birth".

An excellent explanation of the new Vital Statistics Law has been prepared by the State Department of Health and is reproduced in part as follows:

A state system of registration of births, deaths and other vital statistics is established, which shall consist of a central division of vital statistics in the State Department of Health and primary registration districts.

STATE DIRECTOR OF HEALTH IN CHARGE

The director of health is given charge of the state registration system; charged with the enforcement of the act; authorized to issue instructions to secure its uniform observance and is required to prescribe methods, forms and blanks and furnish necessary postage, forms and blanks for obtaining registration of births, deaths and other vital statistics in each registration district, and for preserving the records of the central division. The Public Health Council of the Department of Health is authorized to adopt such regulations as it deems necessary.

Each city, incorporated village and township constitutes a primary registration district. Authority is given the director of health to combine two or more registration districts and he may also establish a state hospital or other public institution as a registration district.

The local registrar of vital statistics in a city is appointed by the local board of health. In incorporated villages the village clerk and in townships the township clerk shall serve as registrar. Each registrar is authorized to appoint, with the consent of the director of health, one or more deputy registrars. When two or more districts are combined, the director of health designates the registrar. A funeral director or embalmer cannot serve as registrar or deputy registrar.

LOCAL REGISTRARS TO SUPPLY BLANKS

Local registrars are required to furnish to physicians, funeral directors and other persons who require them, blank forms of certificates, stamped and addressed envelopes and instructions, and when a birth, stillbirth, or death certificate is presented for record, shall see that it is made out in accordance with law and the regulations. When a certificate is incomplete or unsatisfactory, the registrar shall indicate the defects therein and withhold registering the certificate or issuing a burial permit until corrected.

After making a complete and accurate copy for his own local record, the original certificates are to be forwarded, on or before the fifth day of each month, to the health commissioner having jurisdiction of the primary registration district. Within five days after receiving the certificates, the health commissioner shall forward the original certificates to the Department of Health. Immediate notice must be given the health commissioner when a death certificate shows that death was due to a communicable disease. In city and general health districts the records of vital statistics are to be kept at the office of the board of health.

PROBATE COURT MAY KEEP RECORD

Where the probate court is keeping a record of births, stillbirths and deaths and the probate judge makes formal request to local registrars for a copy of each certificate, such copy must be made from the original certificate and forwarded to the probate judge. The county must pay to the local registrar ten cents for each copy of a certificate so filed. Before making such request, the probate judge should be assured by the county commissioners that they will appropriate funds to pay these fees.

Each local registrar is entitled to a fee for each certificate properly and completely filled out and registered by him, correctly copied for his local record and forwarded to the health commissioner and the Department of Health. The fee is based on the population of the primary registration district, according to the last federal census. The fee for each certificate in a registration district with a population of more than 250,000, is five cents; over 125,000 and less than 250,000, fifteen cents; over 50,000 and less than 125,000, twenty cents and less than 50,000, twenty-five cents. The amount due each registrar is certified, annually, to the treasurer of the county in which the district is located and is paid from the county treasury.

CERTIFICATE MUST BE FILED WITHIN TEN DAYS AFTER BIRTH

Each birth that occurs in this state shall be registered in the district in which the birth occurs. The birth certificate shall contain all items and information required by the U .S. Bureau of the Census and such additional items and information as may be prescribed by the Public Health Council. **The certificate of birth must be filed with the local registrar by the physician or midwife in attendance within 10 days after the birth occurs. If there be no physician or midwife in attendance, the father or mother of the child, the householder, or the manager or superintendent of the public or private institution in which the birth occurs shall immediately notify the local registrar who must, within 10 days, secure from competent informants the information necessary to complete the birth certificate.** Birth certificates are not invalid because of delayed filing. A child born to an unwed mother shall be registered by the surname of the mother. When a certificate of birth is filed without a given name, it is the duty of the registrar, by supplemental report, to secure the given name of the child.

Whoever finds an infant of unknown parentage must make an immediate report to the registrar of the district where the child is found. The prescribed form of report includes: date of finding; place of finding; sex; color or race; approximate age, and the name and address of the person or institution where the child has been placed for care. The place where the child is found shall be considered the place of birth and the date of birth shall be determined by approximation. The child is to be named by the person or the superintendent of the institution where it is left for care and the name reported to the registrar. The foundling report will constitute the certificate of birth unless an actual certificate of birth is obtained in which case the foundling report is to be filed with the certificate of birth.

PROCEDURE WHEN CHILD IS ADOPTED

Where a decree of adoption is made, it is the duty of the court to send a copy of the decree, and a certified copy of the original certificate of birth of the child adopted, to the State Department of Health. The decree and certificate of birth must be properly indexed and filed, and are not open for inspection or to be copied except on request of the adopting parents, the adopted child, or upon court order. A certification of birth containing the name, by adoption, sex, color, date of birth and place of birth of the child shall be issued on request. This certification of birth, if authenticated, is to be accepted as prima facie evidence of the facts therein stated. The fee for this certification of birth is twenty-five cents.

When a woman, who is a legal resident of Ohio, gives birth to a child outside the state, a certified copy of the certificate of birth may be filed with the local registrar of the district in which she has a legal residence. Where such a birth occurs in a foreign country, a certified copy of the certificate of birth, attested by a United States Consul, will be accepted for registration. If the birth occurred in a foreign country or a state in which there is no system of registration of vital statistics, a birth certificate may be filed in the Department of Health on evidence satisfactory to the director of health. Where a birth occurs in a county in Ohio other than that of the residence of the mother and when a death occurs in a county in Ohio other than that of the residence of the deceased, the director of health shall transmit a copy of the birth or death certificate to the health commissioner of the health district in which the mother or deceased resided.

WHAT TO DO WHEN BIRTH CERTIFICATE IS LOST

Any person who claims to have been born in the state of Ohio whose registration of birth is not recorded, or has been lost or destroyed, or where the birth has not been properly and accurately recorded, may make application to the probate court of the county of his birth, the county of his residence, or the county in which his mother resided at the time of his birth, to have his birth recorded or correction made in the record of his birth.

An application to correct a birth record shall set forth all of the available facts required on a certificate of birth and the reasons for making the application and be verified by the applicant. The form of application must meet the approval of the probate judge.

PROBATE COURT PROCEDURE

Upon receiving the application to correct a birth record, the probate court, in its discretion, may fix a date for hearing. If a date is fixed, it may not be less than seven days after the application is filed. The court may also require publication of notice of the hearing. If publication is required, there must be one publication in a newspaper of general circulation in the county at least seven days prior to the date of hearing. The application must be supported by the affidavit of the physician in attendance, if available. If such affidavit cannot be obtained, the application must be supported by the affidavits of two persons having knowledge of the facts stated in the application, by documentary evidence, or such other evidence as the court may deem sufficient. If the probate judge is satisfied that the facts stated in the application are as stated, he shall make an order correcting such birth record. If the proceedings are for the correction of a birth record in some other court or office, the probate judge shall transmit a certified copy of his order to such court or office where it shall be filed, recorded and indexed in the same manner as required for other birth records.

COURT MAY CONDUCT INVESTIGATION

The application to establish a birth record, where there is no record or where the record has been lost or destroyed, must be made on a form prescribed by the probate court and must contain all the available facts required in a certificate of birth and the reasons for making the application. The proceedings relative to hearing and publication are the same as for the correction of a birth record. The probate judge, or a special master commissioner, shall personally examine the applicant in open court and shall take sworn testimony on the application which shall include the testimony of at least two credible witnesses, or clear and convincing documentary evidence. The court may conduct such investigation as it deems necessary and shall permit the applicant and all witnesses presented to be cross-examined by any interested person or by the prosecuting attorney. When the applicant or a witness is unable to appear in open court, the probate judge may authorize the taking of his deposition.

The court, in its discretion, may cause a complete record to be taken at the hearing and shall file the same with the other papers in the case, and may order the transcript of testimony to be filed and made a matter of record in said court. Upon being convinced that the claim of the applicant is true, the court shall make a finding upon all the facts required on a certificate of birth and shall order the registration of the birth of the applicant. The court shall forthwith transmit to the state director of health a summary, duly certified, of the finding and order of the court. The finding and order shall be on a form prescribed by the director of health and on receipt at the Department of Health shall be filed in the records of the Division of Vital Statistics.

The application, affidavits, findings and orders of the court, together with a transcript of the testimony, if ordered, for the correction of a birth record or for the registration of a birth, shall be recorded in a book kept for that purpose and shall be properly indexed. Such book shall become a part of the records of the probate court.

The fee for filing an application to correct a record of birth is $2.00; for filing an application for registration of birth is $3.00. All costs in connection with such application and hearings thereon shall be assessed against the applicant.

A copy of the court order correcting a birth record or finding and order for the registration of a birth, may be sent by the director of health to the appropriate local registrar. A certified copy of a birth record as corrected or registered by court order shall have the same legal effect for all purposes as a certificate of an original birth record.

NEW CERTIFICATES FOR STILLBIRTHS

A stillborn child is to be registered on a standard certificate of stillbirth and not on certificates of birth and death as formerly. The certificate of stillbirth shall contain the items and information required by the U. S. Bureau of the Census and such additional items and information as the Public Health Council may prescribe. A burial permit must be secured from the local registrar before the body of a stillborn child can be buried or otherwise disposed of. A stillbirth is defined to be "an infant of at least four and one-half months gestation whose sex can be determined, which after complete expulsion does not give evidence of heart action, breathing, or movement of voluntary muscles". A separate record, file and index of certificates of stillbirth must be kept by the Department of Health and local registrars.

A burial permit must be issued for every person whose death occurs in Ohio. It is unlawful to inter, place in a vault or tomb, cremate, or otherwise dispose of a human body without securing a burial permit from the local registrar of the registration district in which the death occurred. It is unlawful to issue a burial permit unless the registrar has in his possession a satisfactory certificate of death or stillbirth. Where death is caused by a communicable disease, the health commissioner must give written permission before the body is removed. In deaths caused by violence or external cause, the consent of the coroner must be secured before the body is moved. Bodies shipped from the state must be accompanied by a burial and transit permit. When a body is brought into this state from another state, the body must be accompanied by a burial or removal permit and transit permit issued in accordance with the laws and regulations of the state where death occurred. Before burial or other disposition of a body brought into Ohio from another state, the local registrar shall issue a burial permit and this permit, when returned by the sexton, is to be filed with the burial or removal permit and transit permit.

FORM OF DEATH CERTIFICATES

The certificate of death shall contain such items and information as is required by the U. S. Bureau of the Census and such additional items and information as may be prescribed by the Public Health Council. The certificate must also contain a statement of service, if any, of the deceased in the armed services of the United States, date of entry into service, date of honorable discharge, name and location of the cemetery where deceased was buried, and location, lot and grave number. Other disposition of the body must be stated.

The personal and statistical particulars in a certificate of death or stillbirth shall be given by any competent person who shall sign as informant. The funeral director shall sign for all details relative to the disposal of the body and the military record. The medical certificate showing the cause of death shall be signed by the physician who attended the deceased or by the coroner. If there is reason to believe that death was caused by unlawful or suspicious means, the funeral director shall refer the case to the coroner who shall hold an inquset and make and sign the medical certificate of death.

MUST HAVE BURIAL PERMIT

No sexton or other person in charge of any premises in which interments or cremations are made shall permit a body to be buried, cremated, or otherwise disposed of unless accompanied by a burial permit. He shall endorse on the permit the date of interment, cremation or other disposal and sign his name thereto. The endorsed permits must be returned to the local registrar within 10 days after burial. The sexton or person in charge is required to keep an accurate record of all interments, cremations, or other disposal of dead bodies, and the name and address of the funeral director. Such records are open to public inspection.

All certificates of birth, stillbirth or death shall be printed legibly or typewritten in unfading ink and signed. All signatures on such certificates must be signed by the person required to sign. The use of a facsimile signature is prohibited.

The director of health is given authority to correct any certificate of birth, stillbirth or death on file in the Department of Health when satisfactory evidence, in the form of affidavits or otherwise, is presented to prove that statements recorded are not true. When so established, the original record is to be supplemented by attaching the amended certificate. An amended certificate of birth or stillbirth must be signed by the person who made the original report, by either of the parents, or be established by the sworn statement of any other person having personal knowledge of the matters sought to be corrected. An amended certificate of death must be signed by the physician or coroner, funeral director and informants whose names appear on the original certificate, or may be established by the sworn statement of any person having knowledge of the matters to be corrected. A funeral director or informant cannot correct or amend the causes or duration of causes of death. For proper cause, the director of health may refuse to accept an amended certificate. A certified copy of a certificate so amended shall show the information as originally given and as corrected.

HOW TO OBTAIN COPY OF BIRTH CERTIFICATE

Upon request and the payment of a fee of fifty cents, the director of health is required to supply any applicant with a certified copy of the original certificate of any birth, stillbirth or death registered according to law. A certification of birth is to be issued unless a certified copy is specifically requested. The fee for a certification of birth is twenty-five cents and contains only the name, sex, color, date of birth and place of birth. A fee of fifty cents per hour or fraction thereof is to be charged for a search of the files when no certified copy or certification of birth is made. A certification of birth shall be prima facie evidence in all courts and places of the facts contained therein. All fees received by the director of health are to be paid into the State Treasury. A local registrar is authorized to furnish to any applicant an exact copy of any record of birth, stillbirth or death in his possession and to charge a fee of fifty cents. This fee belongs to the registrar unless he is a salaried employee.

The United States Bureau of the Census, the United States Social Security Board, other federal agencies, and the Ohio Industrial Commission may obtain, without expense to the state, transcripts of or information from certificates of birth, stillbirth or death without payment of the fees provided in this act.

The penalty for violating any provision of the vital statistics law is a fine of not less than $5.00 nor more than $100.00, or imprisonment for a period not to exceed 90 days, or both fine and imprisonment.

OHIO JOINS STATES REQUIRING PREMARRIAGE EXAMINATION

A large number of persons and practically every physician in Ohio will be directly affected by a measure **(Senate Bill 141)** passed by the 94th General Assembly and which will become a law **on August 18**, requiring each applicant for a marriage license to furnish a physician's statement, rendered after an appropriate medical examination, to the effect that such applicant is not infected with syphilis, or, if so infected, is not in a stage of that disease which is communicable or likely to become communicable.

Pertinent parts of this new law are found in the following amended sections of the present marriage statutes; the important matter being in blackface:

"Sec. 11186. Previous to persons being joined in marriage, notice thereof shall be published in the presence of the congregation on two different days of public worship; the first publication to be at least 10 days before marriage, within the county where the female resides; provided, **however, that before the first publication of the banns, the clergyman or spiritual head of the church in which the banns are to be published shall secure from the persons desiring to be married evidence of the fact that there has been filed with the clerk of the probate court of the county in which the female resides the statement, signed by a duly licensed physician of the state of Ohio, that in his opinion neither of the applicants is infected with syphilis in a form that is communicable, or likely to become communicable, together with a laboratory statement as required by the provisions of section 11188 of the General Code or in the event either or both of the persons desiring to be married is a resident of a foreign state which has a similar law requiring a serological test and a physician's examination before marriage, a certificate from such state as provided for in section 11188 of the General Code;** or, a license must be obtained for that purpose from the probate judge in the county where such female resides, provided that it shall be the duty of the probate judge of any county to issue such license to any soldier or sailor of the United States who may be stationed for duty in his county, and to the prospective bride of any such soldier or sailor, **upon compliance with the requirements of section 11188,** regardless of the non-residence of said bride.

"Sec. 11187. No license shall be granted when either of the parties, applicants therefor, is an habitual drunkard, epileptic, imbecile, or insane person, or, when either of such parties is under the influence of an intoxicating liquor, or narcotic drug, or is infected with syphilis in a form that is communicable, or likely to become communicable.

"Sec. 11188. Application for marriage license must be made by the parties to the marriage not less than five days and not more than 30 days before a license shall be issued; each of the persons seeking a marriage license, shall personally appear in the probate court of the proper county and make application therefor, and shall state upon their oaths, the name, age, residence, place of birth, occupation, father's name, and mother's maiden name, if known, of each of the parties to such contemplated marriage, and also state the number of times either party has been previously married. In case the bride is a widow, or a divorced woman, her married name also must be stated, and in addition the name of the person who is expected to solemnize the marriage.

APPLICANT MUST FILE STATEMENT

"Provided, however, no license to marry shall be issued until there shall be in the possession of the clerk of the probate court a statement or statements, signed by a duly licensed physician of the state of Ohio, within 30 days of such examination, that each applicant, within 30 days of the filing of the application for the statement or statements, has submitted to an examination to determine the existence or nonexistence of syphilis, which examination has included a standard serological test or tests for syphilis, and that in the opinion of the examining physician the applicant is not infected with syphilis, or, if so infected, is not in a stage of that disease which is communicable or likely to become communicable; or in the event either or both of the persons desiring to be married is a resident of a foreign state which has a similar law requiring a serological test and a physician's examination before marriage, a certificate from an officer empowered to issue marriage licenses in that state certifying that the laws of said state have been complied with and that the applicant's physical condition is such that he or she could be married in that foreign state. The physician's statement shall be accompanied by a statement from the person in charge of the laboratory making the test setting forth the name of the test, the date it was made, the name and address of the physician to whom a report was sent, and the exact name and address of the person whose blood was tested, but not setting forth the result of the test.

TESTS AND LABORATORIES MUST BE APPROVED BY STATE DEPARTMENT OF HEALTH

"For the purpose of this act, a standard serological test for syphilis shall be a test approved by the state department of health and shall be made at a laboratory approved to make such tests by the state department of health. A report of such test shall be forwarded to the examining physician who has submitted the blood sample.

"Such laboratory tests as are required to be made by this act shall, on request of the physician submitting the sample and on his certificate that the applicant is unable to pay, be made without charge by the state department of health. Where the test is made in a laboratory other than the laboratory of the state department of health, a copy of the report of the test shall be forwarded to the state department of health.

RIGHT OF APPEAL

"Any applicant for a marriage license having been denied a physician's statement as required by this act, shall have the right of appeal to the department of health of the state of Ohio for a review of the case, and the said department shall, after appropriate investigation, issue or refuse to issue a statement in lieu of the physician's statement required by this section.

"The statements of the physician who examined the applicant and the laboratory which made the serological test, shall be uniform throughout the state and shall be upon forms provided therefor by the state department of health. These forms shall be filed by the clerk of the probate court separately from the applications for marriage license and shall be required held and considered as absolutely confidential by any and every person whose duty it may be to obtain, make, transmit, or receive such information or report.

"Any applicant for a marriage license, physician or representative of a laboratory who shall misrepresent any of the facts prescribed by this act or any licensing officer, having failed to receive the statements prescribed by this act, or having reason to believe that any of the facts therein have been misrepresented and who shall nevertheless issue a marriage license, or any person who shall disregard the confidential character of the information or reports required by this act, shall upon conviction thereof in the county wherein such offense was committed, be fined not more than one hundred dollars ($100) to be paid to the use of said county and the costs of prosecution.

PROBATE JUDGE HAS DISCRETIONARY POWER

"Immediately upon receipt of an application for a license the said court shall place the parties' record in a book kept for that purpose and after the expiration of five days and not more than 30 days from the date of the said application, if the judge is satisfied that there is no legal impediment thereto, and one or both of the parties are present, he shall grant such marriage license. Provided, that if the judge shall be satisfied from the affidavit of a reputable physician in active practice and residing in said county, that either of said parties is unable to appear in probate court, by reason of illness or other physical disability, then a marriage license may be granted upon the application and oath as aforesaid, of one of the parties to said contemplated marriage; but in such case the person unable to appear in court by reason of such illness or other physical disability shall, at the time of making such application for marriage license make and cause to be filed in said probate court, an affidavit setting forth the information required herein of applicants for a marriage license; and provided further, that for good cause shown the probate judge may waive the provisions of this section with respect to the period between the application for and issuance of a marriage license, and may grant such license any time after the application therefor, **provided that the physician's statement and the statement of the laboratory required herein shall not be waived except in those cases provided for in section 11181-1 of the General Code where a minor female is involved.**"

ADVICE TO PHYSICIANS

At the request of *The Journal*, Dr. Roy L. Kile, Cincinnati, has prepared a brief analysis of the new law, accompanied by some good advice for physicians making the examinations. Dr. Kile, with other Cincinnatians, took an active part in promoting the enactment of the measure. He is a diplomate of the American Board of Dermatology and Syphilology, member of the American Academy of Dermatology, Cincinnati Society of Dermatology and Syphilology, and Mississippi Valley Dermatological Conference, and associate dermatologist, Good Samaritan Hospital, Cincinnati. Dr. Kile's comments follow:

"Many of us have been quite interested for some time in having a pre-marital and pre-natal law in effect, requiring a physician's statement that such individuals are free of syphilis in a communicable phase or a phase apt to become communicable. At the last session of the Legislature, a bill relating to premarital examinations was passed.

OVER 20 STATES HAVE PRE-MARITAL LAWS

"This law requires a physician's statement regarding syphilis in all candidates for a marriage license. This, of course, will be kept confidential. Twenty other states have such a law, and many more have it under consideration. Unfortunately, the Legislature did not see fit to pass a similar and companion law, that is in effect in many other states, requiring a statement by a physician regarding the presence or absence of syphilis in all prenatal cases. Such a prenatal examination law could have prevented many miscarriages and much congenital syphilis with proper treatment during the pregnancy. We hope this will be passed at a later session of our Legislature.

"Undoubtedly, many cases of syphilis will be uncovered by the premarital examination alone; such has been the experience in the states having such a law in force. It has worked out very satisfactorily in these states. An invaluable series of statistics regarding the incidence of syphilis in Ohio will be accumulated.

"It certainly is not the purpose of the law to prevent people with syphilis from marrying. Its purpose, however, is to prevent those with communicable syphilis from so doing, as well as to call their attention to its presence. This latter character of the law is probably its main virtue. Another principal effect of the law will be its educational value in calling venereal disease, in general, to the public's attention. Adequate treatment can then be explained and the patient convinced as to its importance.

COOPERATION OF PHYSICIANS AND LABORATORIES ESSENTIAL

"The cooperation of physicians and laboratories is essential. Physicians must become acquainted with the possibilities of contagion in syphilis and not hold up marriage licenses in syphilitics under treatment or in old latent cases. Many problems in individual judgment will arise, but most people who know they have syphilis want it treated adequately and particularly this is true if they thoroughly understand the possibilities of its late effects. The physician must decide whether or not it is communicable. It is best to err on the safe side, although many syphilitics may safely marry.

"Many physicians will undoubtedly conduct complete physical examinations on those applying to him for the serology test. **It offers an opportunity to adequately check people in this age group, and although only syphilis is specified in the law, it need not be limited to this, by any means.** There has always been the problem, in drafting these laws, of how far to carry them into checks for venereal disease. **As the serology offers the most concrete evidence—even though it is far from infallible—it alone is specified. It certainly does not limit the physician from taking smears or doing any other studies he may desire.**

"A further study and improvement of our laboratories is essential. Through the physicians, the standards of our laboratories can be maintained. I see no reason why this new law will not work satisfactorily and to the mutual benefit of all concerned."

RESPONSIBILITIES OF STATE DEPARTMENT OF HEALTH

Important duties and responsibilities relating to the enforcement and administration of the premarriage examination law are vested in the State Department of Health, namely: Designation of what shall be regarded as "a standard serological test for syphilis"; approval of laboratories for making such tests; providing of forms for reports of physicians and laboratories; and hearing appeals filed by dissatisfied applicants.

As this article was written, Dr. R. H. Markwith, State Director of Health, and his department were assembling the machinery to carry out the administrative activities of that department.

For the purposes of Senate Bill 141 and in accordance with Section 11188 of the General Code, only laboratories which have been approved by the State Department of Health are permitted to perform serological tests on blood specimens submitted by physicians from applicants for a marriage license. Thirty-three laboratories have been provisionally approved. In a letter to the secretaries of county medical societies, Dr. Markwith stated that the State Department of Health laboratory will perform these serological tests only when the physician certifies that the applicant is unable to pay for a serological test in an approved laboratory.

PROCEDURE TO BE FOLLOWED BY PHYSICIANS

Physicians should follow the same procedure they usually do in submitting blood specimens for examination. The result of the test will be transmitted to the physician by the laboratory as a separate confidential report on the regular form used by the laboratory in making such reports. If the result of the test is negative, in addition to the confidential report the physician will also receive from the laboratory an official form, provided by the State Department of Health, on which will appear the name and address of the applicant; name and address of the physician who submitted the blood; name and date of test and name of the laboratory. The lower half of this blank has to be filled out and signed by the physician. It includes the name and address of the applicant, and the following statement:

"In my opinion, this applicant is not infected with syphilis, or, if so infected, is not in a stage of that disease which is communicable or likely to become communicable."

This form, when completed, must be filed by the applicant with the Clerk of the Probate Court where application for marriage license is made within 30 days after the date of examination.

LIST OF PROVISIONALLY APPROVED LABORATORIES

Following is a list of the laboratories which have been provisionally approved for the performance of serological blood tests for premarital examination in compliance with Section 11188 of the Ohio General Code. Names of these laboratories have been furnished probate judges and secretaries of county medical societies throughout the state:

Akron—Dr. Margaret R. Baker, Children's Hospital.

Bowling Green—Dr. J. R. Beck, Bowling Green Clinical Laboratory, Bank Bldg.

Canton—Dr. Raymond S. Rosedale, Mercy Hospital Laboratory.

Cincinnati—Dr. Maynard O. Brown, 5 West Fourth St.; Mary B. Day, Manager, Langdon-Meyer Laboratories, 519 Main St.; Dr. William McKee German, Director, Good Samaritan Hospital Laboratory; Dr. Douglas Goldman, 630 Vine St.; Dr. John W. Leichliter, Christ Hospital; Dr. Aurelia P. McIntyre, 903 Carew Tower; Charles J. Rosebrook, Director, Rosebrook Clinical Laboratory, 580 Doctors' Bldg.

Cleveland—Dr. Rafael Dominguez, St. Luke's Hospital; Dr. Benjamin S. Kline, Mount Sinai Hospital; Dr. Henry A. Lichtig, Polyclinic Hospital; Dr. D. J. Rehbock, St. Vincent Charity Hospital; Dr. Herbert S. Reichle, Cleveland City Hospital; Dr. Harry J. Sneiderman, St. John's Hospital.

Columbus—Dr. Horace B. Davidson, 188 East State St.; Dr. Anson L. Brown, 327 East State St.; Dr. Roswell S. Fidler, White Cross Hospital; Dr. Ralph M. Hartwell, St. Francis Hospital; Dr. Ben C. Houghton, Children's Hospital; Elizabeth M. Myers, 240 East State St.; Dr. H. L. Reinhart, Starling-Loving University Hospital.

Dayton—Dr. Walter M. Simpson, Miami Valley Hospital.

Dover—Dr. Max Shaweker, Union Hospital.

Gallipolis—Clinton C. Cole, Gallipolis Clinic Laboratory, 52 State St.

Lancaster—Dr. H. M. Amstutz, Lancaster Municipal Hospital.

Lima—Dr. John LoCricchio, Lima Memorial Hospital.

Toledo—Dr. Matthew Ginsburg, Lucas County Hospital; Dr. S. S. Hindman, Women's and Children's Hospital; Dr. Theodore Zbinden, Flower Hospital Pathological Laboratory.

Youngstown—Dr. William Dean Collier, St. Elizabeth's Hospital Dr. Gabriel B. Kramer, Youngstown Hospital.

BASIS FOR LABORATORY APPROVAL

According to Dr. Markwith, the basis for this provisional approval was the plan for registration of laboratories drafted last Fall by a special Advisory Committee on Serodiagnosis of Syphilis to the department. (See page 1338, December, 1940, issue, *The Ohio State Medical Journal*). This plan was subsequently approved by The Council of the Ohio State Medical Association and the Ohio Public Health Council. It sets up standards for laboratories and procedures under which laboratories may obtain official approval of the State Department of Health.

In that report the following standard sero-

logical tests for syphilis were approved: Eagle, Hinton, Kahn, Kline and Kolmer. For the purpose of Senate Bill 141, any of these tests will be recognized by the department as "standard serological tests for syphilis".

BLINDNESS PREVENTION MEASURE WILL BECOME LAW ON SEPT. 4

The recent General Assembly passed three laws on the general subject of blindness—one a preventive measure, one relating to blind relief, and the third pertaining to a building program at the state school for the blind.

House Bill 522, effective September 4, amends present statutes relative to the reporting, investigation, and treatment of inflammation of the eyes and providing for the use of a prophylactic.

The first section of the new law defines "inflammation of the eyes of the new born" as "any inflammation, swelling or redness in either one or both eyes of an infant, either apart from or together with an unnatural discharge from the eye or eyes of such infant, independent of the nature of the infection, if any, occurring any time within two weeks after the birth of such infant. This is the same as in the present law. However, a new provision reading as follows is added: "Any inflammation of the conjunctiva or cornea, either apart from or together with any unnatural discharge from the eye or eyes, occurring at any time after two weeks after birth, if caused by the gonococcus, shall be known as 'gonorrheal ophthalmia' ". **The amendment establishes a new classification of inflammation of the eyes, known as "gonorrheal ophthalmia", applying to adults as well as infants.**

MUST REPORT CASES WITHIN SIX HOURS

It is the duty of any physician, nurse, midwife, maternity home or hospital, parent, relative, or any other person attending a person with inflammation of the eyes of either classification to report the case within six hours after knowing such inflammation to exist, to the health commissioner of the city or general health district within which the afflicted person resides. The health commissioner to which the report is made is required to have the case investigated, to report his findings to the State Department of Health, and to refer to the Ohio Commission for the Blind for treatment all cases which, in his opinion, are in need of medical attention.

Enforcement of the act is vested in the State Department of Health. That department is authorized to make rules and regulations for such enforcement, to provide for the gratuitous distribution of prophylactic for inflammation of the eyes of the new born to physicians and midwives, to issue warnings regarding inflammation of the eyes and gonorrheal ophthalmia, to furnish copies of this law to physicians and public health workers, to keep records on all reported cases and to report violations of the law to the state medical board and local prosecutors. Authority to see that each case is receiving proper treatment and nursing care is vested in the State Commission for the Blind.

A very important section of the new law provides that a physician, midwife or any other person attending a case of childbirth to use in the eyes of the infant, immediately after birth, some prophylactic against inflammation of the eyes of the new born and to make a record of the prophylactic used. This must be done in every childbirth case regardless of the place of birth. The present statute provides that a prophylactic shall be used only when the birth occurs in a maternity home, hospital, public or charitable institution and does not relate to births occurring in the home.

A penalty for violation of any provision of the act is provided, being a fine of not less than $50.00 and not more than $100.00 for the first offense and a fine of not less than $100.00 nor more than $300.00 for each subsequent offense.

STATUES PERTAINING TO NEEDY BLIND REVISED

House Bill 601, which becomes effective September 4, revises the statutes relating to aid for the needy blind. It removes the age limit on those entitled to aid and permits benefits up to $40.00 per month, a $10.00 increase. **All medical examinations and treatments must be rendered by a "doctor of medicine, skilled in diseases of the eye".** Power of the State Department of Welfare in administering the act is increased, authority being given the department to enforce compliance with the law on the part of county commissioners in event of negligence. Furnishing of a list of names of beneficiaries to persons or organizations is made unlawful. Doctors of medicine making examinations are entitled to a fee not to exceed $3.00 for examining an applicant for blind relief and a fee not to exceed $5.00 for special examinations in doubtful cases. Upon approval of the state department, county commissioners may pay for medical and surgical procedures to benefit persons receiving blind relief, the compensation to be paid directly to the doctor of medicine performing the services, instead of to the beneficiary.

COMMISSION TO BE APPOINTED

Senate Bill 368, effective September 5, authorizes the appointment of a special commission of three senators, three representatives and three persons appointed by the Governor, to make recommendations for the disposal of the present sites of the state school for the blind, the state school for the deaf, and other institutions under the supervision of the State Department of Public Welfare, the acquisition of new sites and the construction of new buildings for such institutions. The commission is instructed to make a report of its findings and recommendations to the Governor and to the 95th Ohio General Assembly on or before January 10, 1943.

LAWS GOVERNING TUBERCULOSIS HOSPITALS ARE MODERNIZED

Two laws dealing with tuberculosis hospitals were enacted: **House Bill 59** which will take effect on September 5 and **House Bill 299** which became a law on July 9.

House Bill 59 is for the most part a recodification of existing laws relating to municipal, county and district tuberculosis hospitals and clinics. These laws had become obsolete in some respects. The new code will provide continuity and clarity.

IMPORTANT NEW PROVISIONS

However, there are some new provisions, the more important of which are: (1) All tuberculosis sanatoria must conform to rules, regulations and standards established by the State Department of Health; (2) maintenance, care and treatment provided by sanatoria are defined to include "proper housing and nutrition, the use of approved and modern medical and surgical methods of treatment, skilled nursing attention, and such educational and prevocational rehabilitation, or other services, as the medical superintendent of such tuberculosis institution may prescribe"; (3) five counties, instead of 10, may combine to erect and maintain a tuberculosis hospital; but present districts containing more than five counties may continue to operate; (4) **each sanatarium shall have a medical superintendent, appointed by the board of trustees, and, except in hospitals having less than 50 beds, the medical superintendent, or a qualified assistant, shall serve on a full-time basis**; (5) management of a county tuberculosis hospital is vested in a board of trustees of three members appointed by the county commissioners, except in the case of hospitals of less than 50 beds when the county commissioners may serve as a board of trustees; (6) more practical methods of establishing tuberculosis clinics where needed are provided; (7) expenses of employees of a tuberculosis hospital in attending conferences on tuberculosis to improve their skill and knowledge of the subject may be paid from the hospital's maintenance fund if the attendance of such employees at the conference is authorized by the board of trustees or the hospital superintendent; (8) county commissioners may establish a record bureau and appoint a director for the purpose of keeping records on all tuberculosis cases in the county.

TAX LEVY AUTHORIZED

In **House Bill 299** provision is made for financing county tuberculosis hospitals. It authorizes a tax levy in excess of the 10-mill limitation to supplement general fund appropriations for tuberculosis hospitals. This levy, which may be authorized by the county commissioners, may not exceed 65/100 of a mill and must be approved by a majority vote of the electors of the county. The proposed tax levy may be submitted to the electorate whenever the commissioners determine that funds available from general funds are not sufficient to operate the hospital.

WORKMEN'S COMPENSATION ACT AMENDED BY "AGREED" BILL

Changes in the Ohio Workmen's Compensation Act always are of interest to members of the medical profession because of the important part which professional services play in the administration of that law. Therefore, an analysis of some sections of **House Bill 558**, the "agreed" bill between labor and industry, amending the Workmen's Compensation Act, would appear to be in order. This law becomes effective September 4.

Changes in benefits to injured workmen are provided as follows: Weekly maximum for temporary total disability increased from $18.75 to $21.00 with an aggregate maximum of $4,200 instead of $3,750; weekly maximum for temporary partial disability or wage impairment increased from $18.75 to $21.00 with an aggregate maximum of $4,000 the same as the present law; weekly maximum for permanent partial disability increased from $18.75 to $21.00 with an aggregate maximum of $5,250; weekly maximum for loss of members increased from $18.75 to $21.00 with an aggregate maximum of $4,514 an increase from $4,031.25; weekly maximum for rehabilitation (new) $10.00 with an aggregate maximum of $260; weekly maximum for permanent total disability increased from $18.75 to $21.00 with no limit on the aggregate amount payable, the same as in the present law; weekly maximum for death claim increased from $18.75 to $21.00 with an aggregate maximum of $7,000, an increase of $500.

MINIMUM PREMIUM MAY BE ESTABLISHED

A minimum premium may be established by the Industrial Commission to facilitate collections from temporary and unscrupulous employers. Provision is made for classification of occupations and industries according to the hazards of occupational diseases; for collection of a minimum premium of two cents per hundred dollars of the aggregate payroll of each classification; and for merit rating in occupational disease premium assessments after January 1, 1942. Any award collected by a claimant in another state will be credited upon the amount of any award paid to him by the Ohio Commission and an employee who is a resident of another state and insured under its laws will not be entitled to benefits under the Ohio law while he is temporarily in Ohio.

It is provided that the two-year statute of limitation will run against claims (including medical-only claims) unless written application is made to the Industrial Commission in state fund cases or written notice is given to the Commission in self-insurer cases or payments of compensation or benefits (not medical expenses) shall have been made to a self-insurer's employee within two years after the injury.

ALLOWANCES FOR PARTIAL DISABILITY

An employee who has suffered a partial disability may receive two-thirds of his loss of earning power for the first 52 weeks after recovering from temporary total disability caused by the accident but, thereafter, he must elect whether he will continue on the old wage impairment basis with a maximum of $4,000 or will take a percentage of 250 weeks. If he does not elect he will be presumed to have elected a percentage basis. Provision is made for an over-all maximum of $6,000 for percentage disability, including compensation for loss of member.

There are new provisions relating to rehabilitation training for injured claimants. A fund of $10,000, part state and part Federal money, is provided for living maintenance of injured employees receiving rehabilitation instruction by the State Bureau of Vocational Rehabilitation. No employee may receive more than $10.00 per week and the maximum period of training is set at 26 weeks. If possible an employee must start the training course within 60 days after the date when he is sufficiently recovered from his injury to do so. Provision is made whereby the Commission may pay for the cost of an artificial appliance for the employee enrolled in the training course upon recommendation of the rehabilitation bureau.

LIEN MAY BE FILED AGAINST NON-COMPLIERS

Where a claimant appeals a silicosis claim to the Medical Board of Review, he must submit to an examination by the silicosis referees of the Commission and such referees will make a report to the board of review. During the first 12 weeks of compensation, the claimant shall be paid on the basis of his full weekly wage at the time of the injury. **In cases of non-complying employers against whom an application for compensation or benefits is pending, the Commission may file an affidavit with the county recorder of the county in which the property of the employer is located and such affidavit shall become a lien upon the real and tangible personal property of such employer. Enforcement of this provision will minimize the number of claims which have to be placed with the Attorney General for collection, many of which at present are small "medical-only" claims, and will expedite the payment of amounts due physicians for services rendered employees of delinquent employers.**

ONE BILL AMENDING MEDICAL PRACTICE ACT ENACTED

Six measures proposing changes in the Medical Practice Act were introduced in the 94th General Assembly. One **(House Bill 474)** was passed and signed by the Governor. Another was passed by the Assembly and vetoed by the Governor. **(House Bill 198).** The remaining bills failed to pass.

House Bill 474, effective September 4, and sponsored by the osteopaths, provides for the annual re-registration of osteopaths by the State Medical Board and requires that a certain amount of additional educational work must be taken by an osteopath to obtain an annual certificate. It does not affect in any way the provisions of the Medical Practice Act relating to the legal rights and privileges of osteopaths.

The purpose of **House Bill 198** was to provide additional income for the State Medical Board by making nominal increases in the fee for entering board examinations and, in the reciprocity fee, and levying a fee for execution of credentials for physicians moving to another state. The Governor in his veto message pointed out that he felt the present examination fee is adequate. (See page 695, July, 1941, issue, *The Journal*, for complete details regarding the veto of this measure.)

The proposals which failed to pass were a bill to create a separate board to examine and license chiropractors; one to exempt Christian Science practitioners from the provisions of the Medical Practice Act; a measure to increase the size of the State Medical Board by adding two osteopaths as members; and one to make the provisions of the Medical Practice Act relating to appeals from decisions of the board conform to customary appellate procedure.

LAWS DEALING WITH MENTALLY ILL AND WELFARE SET-UP

Three measures dealing with administrative activities of the State Department of Welfare and the care of the mentally ill, feeble-minded and epileptic received the approval of the General Assembly during the recent regular session.

Senate Bill 25, which went into effect on April 10, appropriated $618,500 to be used in paying the City of Cleveland and various private detention hospitals for the care of insane patients during 1939 and 1940.

Revisions in the administrative set-up within the State Department of Welfare are provided for in **Senate Bill 133**, which became a law on July 28.

FOUR DIVISIONS ESTABLISHED

The following divisions are established in the department: **Business administration, correction, mental diseases, and social administration.** The director is given authority to establish other divisions and to prescribe their powers and duties under general laws.

The Division of Business Administration is authorized to exercise general business management and fiscal supervision and control of the department and the institutions managed by the department.

Supervision over the management and operation of the penal and reformatory institutions and services is delegated to the Division of Correction.

Of particular importance are the sections creating the other two divisions. To the Division of Social Administration is assigned administrative control and supervision of **activities pertaining to aid, support, service or care to needy persons at public expense, including medical care as defined by law; services for the physically handicapped, and child welfare services.** The activities of the Division of Aid for the Aged are not included as a part of the duties and responsibilities of this new division.

All powers and duties which the department or any present division or agency of the department has with respect to the management and operation of hospitals and institutions and services **for the insane, criminal insane, epileptic, feeble-minded, psychopathic and mentally ill or defective are delegated to the new Division of Mental Diseases,** excepting the Bureau of Juvenile Research but the director of welfare may assign the bureau to this or another division.

CHIEFS TO BE APPONTED BY DIRECTOR OF WELFARE

Each division will be headed by a chief, appointed by the director of welfare, who shall be in the classified civil service. **The chief of the Division of Mental Diseases shall be designated as the Commissioner of Mental Diseases. He shall be a reputable physician, graduate of an accredited medical college and, shall have had at least 10 years of experience in the practice of medicine in the field of nervous and mental diseases, including at least five years of institutional experience in the care and treatment of persons with mental diseases.**

The director of welfare is given broad and extensive powers. He shall supervise the work of each division and be responsible for the determination of general policies; shall have the power to control transfers of patients and inmates between the several state institutions; and must approve appointments, promotions, removals, demotions, etc., made by the chiefs of the divisions.

In connection with the divisions of correction, mental diseases and social administration, the director of welfare is required to appoint advisory councils, each consisting of five persons. **At least two members of the advisory council to the Division of Mental Diseases must be psychiatrists with not less than five years of experience in the care and treatment of the mentally ill.**

MANY CHANGES IN EXISTING STATUTES

Extensive and material changes in the present statutes governing the commitment, care, treatment and custody of the mentally ill, feeblemined and epileptic are made through the enactment of **Senate Bill 173**, which will become a law on September 4. Time and space will not permit a complete analysis of this 21-page measure but following are some of its outstanding provisions:

Complete supervision of all activities now handled by the Division of Mental Diseases is vested in the director of welfare except supervision of matters relating to the medical treatment and care of the mentally ill which is assigned to the Commissioner of Mental Diseases.

BUREAU OF MENTAL HYGIENE CREATED

A Bureau of Mental Hygiene within the Division of Mental Diseases is created for the purpose of making scientific and medical investigations relative to the cause and prevention of mental illness and carrying on an educational program among the public.

The superintendent of an institution is granted authority to proceed with any major surgical operation on inmates "in cases of grave emergency where the medical staff feels that surgical or other intervention is necessary to prevent serious consequences or death".

The director of welfare and commissioners of mental diseases shall consult with the advisory council of the Division of Mental Diseases before appointing a superintendent for a state or receiving hospital.

The following definitions are set forth:

"Mental illness, mental disease, mental disorder, shall mean an illness which so lessens the capacity of the person to use his customary self-control, judgment and discretion in the conduct of his affairs and social relations as to make it necessary or advisable for him to be under treatment, care, supervision, guidance or control. The terms shall be construed to include lunacy, unsoundness of mind, and insanity."

"The term feeble-minded or mentally defective refers to any person who is not mentally ill but whose intellectual development is so retarded that he has not acquired sufficient control, judgment and discretion to manage himself and his affairs, and for whose own welfare or that of others, supervision, guidance, care or control are necessary or advisable."

The Division of Mental Diseases is given the right to inspect, license and supervise all institutions for the mentally ill maintained in whole or in part by public funds or by any political subdivision and **all private institutions receiving mentally ill persons for care and treatment. Provision is made for the licensing of private institutions and setting up standards and regulations which they must meet. Each such institution must have on its staff a duly qualified physician "who is responsible for the medical care of the patients confined therein" and has had at least three years practical experience in the treatment of persons mentally ill.**

In commitment hearings, the probate court need not use more than one physician for the examination of persons alleged to be mentally ill but he may order an examination by other physicians if he deems it necessary.

Changes are made in the provisions relating to receiving hospitals at the various state institutions, detention hospitals, voluntary commitments, leasing or rental of municipal or private hospitals for the care of the mentally ill who cannot be accommodated in state institutions, and the financing of the care of such persons.

It is suggested that physicians specializing in mental and nervous diseases and the managers of private hospitals caring for the mentally ill obtain the complete text of Senate Bill 173, as enacted, from the Secretary of State.

CHANGES IN PROBATE CODE AFFECTING PHYSICIANS

Every physician at some time during his professional career finds himself concerned with the settlement of the estate of a deceased patient. Therefore, every physician should be familiar with certain provisions of the Ohio Probate Code under which estates are administered and settled. When confronted with such matters it is advisable for a physician to confer promptly with the Probate Court and with officials delegated the responsibility of administering the estate. Competent legal counsel should be obtained if controversial questions arise.

For reasons cited above, Ohio physicians are directly concerned with revisions made by the 94th General Assembly in the Ohio Probate Code through the enactment of **Senate Bill 116**, effective August 22. There are certain sections of the revised Probate Code which change the procedure relating to claims for professional services against estates.

In order to give its readers accurate information about such changes, *The Journal* requested Mr. Robert F. Maskey, Cleveland attorney, who served as secretary of the Committee on Probate Code of the Ohio State Bar Association, sponsor of **Senate Bill 116**, to prepare a digest of sections of particular interest to physicians. Mr. Maskey was kind enough to do so. Therefore, *The Journal* considers itself fortunate in being able to present the following analysis, prepared by him:

IIMPORTANT CHANGES ANALYZED

"A physician who seeks to recover from the estate of a deceased person, for services rendered to the decedent during his lifetime, must distinguish between services rendered during the last illness and services rendered prior thereto. **To the extent that such services were rendered during the last illness, the physician is entitled to payment from the assets of the estate in preference to substantially all other creditors. (GC 10509-121). He and the funeral director constitute one class of preferred creditors.** This preference is not a preference as to time of payment, but is **a preference in right to participate in the assets of the estate**, in cases where the assets are not sufficient to pay all creditors. To the extent that the physician has rendered services prior to the last illness, he is not a preferred creditor with respect to such services, but participates in the assets as a general creditor.

"A physician must present a claim to the executor or administrator in the same manner and within the same time as any other creditor, regardless of whether his services were rendered during the last illness or prior thereto. (GC 10509-121). **The claim must be presented in writing within four months after the appointment of the executor or administrator.** While the claim must be presented in writing, the statute does not prescribe the form of the writing, and **an ordinary statement for services rendered is sufficient to comply with the statute.** (GC 10509-112). If the executor or administrator is not satisfied with the statement of claim which the physician presents, he may require additional proof in writing, and may require the affidavit of the physician in support of the claim. (GC 10509-114).

PHYSICIAN MAY FILE SUIT

"If the executor or administrator rejects the claim, he must give the physician written notice of his action. (GC 10509-113). **Within two months after rejection, the physician must file suit in court to establish his claim.** (GC 10509-133).

"If the physician should be acting as executor or administrator of the estate, he must present his claim to the Probate Court within three months, rather than four months. (GC 10509-106).

"In certain exceptional cases, the claim may be filed after the expiration of four months following the appointment of the executor or administrator. **The exceptions are:**

"(a) That the physician did not have actual notice of the decedent's death, or of the appointment of the executor or administrator.

"(b) That the physician's failure to present his claim was due to the absence of the executor or administrator from his usual place of residence or business during a substantial part of the period of four months, or was due to some wrongful act or statement on the part of the executor or administrator or his attorney.

"(c) That the physician was subject to some legal disability during the original period of four months.

"After the expiration of nine months following the appointment of the executor or administrator, all claims are barred, and the physician has no further right to present his claim. (GC 10509-134).

"Under ordinary circumstances, the executor or administrator may pay creditors, including the physician, after the expiration of four months following his appointment. (GC 10509-127). The physician is not entitled to payment prior to the expiration of this period. If the executor or administrator voluntarily makes payment prior to such time, as is frequently the case, he assumes certain risks in the event it later develops that the estate is insolvent.

"While the executor or administrator may pay the creditors at the expiration of four months, conditions may exist which justify him in postponing payment to a later date. As an example, the statutes provide a means whereby the executor or administrator may secure the approval of the Probate Court before making payments to the creditors of the estate. (GC 10509-119). If the executor or administrator elects to seek this protection, the creditors cannot be paid at the expiration of four months, because the executor or administrator cannot seek the approval of the court until after four months have elapsed. The general rule stated in the preceding paragraph will frequently be subject to exception, depending upon the condition of the particular estate."

INSPECTION AND LICENSING OF REST HOMES PROVIDED

A system of inspecting and licensing of rest, convalescent and boarding homes for the aged or mentally or physically infirm will be placed into operation in Ohio on January 1, 1942, under the provisions of **House Bill 582**, passed by the recent State Legislature. **This legislation was badly needed not only as a health safeguard but to eliminate a "racket" which has been growing during recent years.**

Application for a license or renewal of a license to operate such a home must be made to the State Department of Welfare in accordance with rules and regulations prescribed by the director of the department. A fee of $5.00 is set.

Upon the request of the Welfare Department, an inspection of any such home shall be made by the Department of Industrial Relations, the State Department of Health and the State Fire Marshal, and a written report made of their findings by such agencies.

The welfare director may refuse to issue a license unless he is satisfied a home is satisfactory in construction, fire prevention and protection, heating, water supply and sanitation, and that it is adequately equipped and maintains a personnel sufficient in number and training to care properly for its inmates. The Welfare Department is given authority to investigate the character and financial responsibility of homes and to prescribe standards of character and financial responsibility which must be met. Homes are required to keep certain records and make reports periodically. Penalties for violation of the act are provided.

BOARD TO EXAMINE AND LICENSE NURSES CREATED

Effective January 1, 1942, the regulation of the practice of professional nursing in Ohio and the examination and licensing of nurses will be carried on by a state nurses' board, created by **House Bill 49**, passed by the 94th General Assembly. At present these duties are performed by the State Medical Board through its Division of Nurse Registration and the Nurses' Examining Committee.

The state nurses' board will consist of five registered nurses appointed by the Governor. This board will have all of the authority and perform all the duties now vested in the State Medical Board and the Nurses' Examining Committee of the board, pertaining to the registration of nurses and the regulation of that profession. The act consists of 29 sections, most of which contain provisions similar to those of the present Nurses' Practice Act.

A "registered nurse" is defined by the act as "one who possesses a blend of intellectual attainments, attitudes and manual skills based on the principle of scientific medicines acquired by means of a prescribed course in a school of nursing affiliated with a hospital recognized for such purposes by the state and practiced in conjunction with curative or preventive medicines by an individual licensed to do so by the state". The definition also states that a "registered nurse, trained nurse or graduate nurse or person using the initials R.N., T.N. or G.N., or symbols of like import, therefore is one who has met all the legal requirements by registration as provided by law and who practices or holds a position by virtue of her professional knowledge and legal status".

In other words, the terms "registered nurse", "trained nurse" and "graduate nurse" and their symbols are construed as synonymous and to use such titles a nurse must hold a certificate issued by the board. Penalties for violations are provided. However, anyone may render nursing

services without penalty provided such person does not represent herself to be a "registered, trained or graduate" nurse or use the titles "R.N., T.N. or G.N." The act specifically states that a nurse holding a certificate from the State Nurses' Board shall not have the right to engage in the practice of medicine.

The board is given authority to prescribe minimum requirements of curricula of schools of nursing and set standards for approving such schools. Registered nurses now holding a certificate must surrender such certificate to the new board which will issue to them a new certificate. No fee is charged for this reissuance of a certificate.

New applicants for a certificate through examination must be at least 21 years of age, high school graduates and graduates of an approved school of nursing as defined by the board, which school must be connected with a hospital or a sanatorium.

LAW PERMITTING TOWNSHIPS TO BUILD HOSPITAL ENACTED

An act (**House Bill 372**) effective August 21 provides for the creation of joint township hospital districts and sets up the machinery for the erection and maintenance of general township hospitals through vote of the electors of the variour townships. Most of the sections of the act are highly technical so no attempt will be made to enumerate their provisions. Those interested in this act should obtain a copy of the act from the office of the Secretary of State. The purpose of the statute is to provide a way by which contiguous townships in any county, through vote of the electors, may erect and operate a general hospital. There are some communities where hospitalization services are not available and where such needs cannot be met through a municipal or county hospital because of unusual geographical conditions.

MOSQUITO CONTROL BILL IS PASSED; EFFECTIVE SEPT. 4

Additional health protection for the public through an organized program to exterminate or prevent mosquitoes, flies and other insects is provided for in **House Bill 600** which will become a law on September 4. The measure amends certain statutes relating to the organization and powers of sanitary districts, giving the sanitary district authorities the power to purchase supplies, materials and equipment, employ technicians and laborers, and build, construct, maintain and repair such structures, devices and improvements as may be necessary to exterminate mosquitoes and other insects and abate their breeding places. These authorities must draft a plan and properly publicize it. It must be approved by the State Department of Health. Any plan is subject to review by the common pleas court if written objections are filed with the court. Any landowner failing or neglecting to comply with the regulations of the sanitary district authorities pertaining to insect control may be fined. In event the authorities delegate employees to abate the conditions which exist on the land of an non-complying landowner, the costs shall be certified to the county auditor who shall place them on the tax duplicate and they shall be collected by the county treasurer as other assessments.

I AND R LAW IS TIGHTENED UP TO PREVENT ABUSES, FRAUD

Changes in the Initiative and Referendum Law to prevent abuses and to clarify various provisions are provided in **Senate Bill 216**, passed by the General Assembly and effective August 1.

There have been many abuses and considerable fraud in the circulation of initiative petitions during recent years. The amendments tighten up the law to minimize abuses and fraud, yet preserve the spirit and intent of the law. **Those who remember the use of the initiative and referendum by various limited practice groups some years ago in efforts to destroy the Medical Practice Act will readily realize the importance of Senate Bill 216 from the standpoint of public health, medical standards and medical education.**

Following are some of the major changes resulting from the enactment of **Senate Bill 216**:

Publicity which is circulated among the voters with reference to a proposed law or constitutional amendment which involves the expenditure of funds or the levying of a tax shall include an official estimate by the tax commissioner of the annual expenditures or the annual taxes which would be required. Part-petitions shall be printed by the state at the expense of the petitioners and serially numbered.

A solicitor of names on a petition must fill in certain data on each part-petition and must state the amount of the consideration, if any, he is receiving for circulating the petition and from whom received. Also, **the solicitor must sign an affidavit that the signatures appended were made and appended in his presence on the date opposite each name**, that the signatures are of the persons whose names they purport to be, and that the electors signing the petition did so with knowledge of the contents of the petition.

Those sponsoring a petition must list the names of solicitors with the Secretary of State and the number of part-petitions to be issued to each. The Secretary of State is expected to keep a record of the serial numbers of part-petitions and shall not accept for filing any petition or part-petition circulated by anyone other than a listed solicitor.

A circulator of a petition must keep it in his possession at all times when signatures are being affixed and shall not leave it where it may be signed otherwise than in his presence. This prevents leaving of petitions in places of public resort—a practice which has resulted in much fraud and collusion. Boards of election may seize petitions left in public places for the obtaining of signatures and the Secretary of State may destroy such petitions or part-petitions.

No part-petition shall be deemed properly verified if the affidavit to be signed by the solicitor is not properly filled out, if the affidavit is not properly signed and verified, if the affidavit is altered by erasure, interlineation or otherwise, if the affidavit is false in any respect, if possession or custody of the petition has been relinquished by the solicitor as described above, and if any one person has affixed more than one signature thereto.

The Secretary of State shall reject any petition which does not purport to contain at least the minimum number of signatures required. Boards of election shall reject all signatures of persons who are not qualified electors at the time of the count and shall reject a part-petition in its entirety if the part-petition is not properly verified.

A part-petition shall become invalid 18 months after the date of its issuance by the Secretary of State, placing a reasonable time limit upon the circulation of petitions.

All part-petitions must be returned to the Secretary of State at the same time, an additional 10 days for obtaining additional signatures being allowed solicitors if the petition is found insufficient. No signature on a supplementary petition which is the same as one on an original part-petition shall be counted.

The Secretary of State is given the right to review the proceedings of local boards of election if they are not reviewed in the courts and his rulings may be reviewed by the Common Pleas Court of Franklin County.

Surgeons To Meet in Mexico City

The International College of Surgeons will hold its fourth international assembly in Mexico City, August 10-14, at the invitation of the Mexican government. Headquarters will be at the Hotel Reforma. Included in the list of 120 speakers are two Ohioans, Dr. Andre Crotti, Columbus, and Dr. Fred M. Douglass, Toledo. Past-president of the College, Dr. Crotti, will speak on "Cancer as It Stands Today: Original Research". Dr. Douglass, past-president of the United States Chapter of the College, will discuss: "Surgery of the Gallbladder and Bile Ducts".

Coming Meetings

Ohio State Medical Association, Columbus, April 28-30, 1942.

American Medical Association, Atlantic City, June 8-12, 1942.

American Association of Obstetricians, Gynecologists and Abdominal Surgeons, Hot Springs, Va., Sept. 11-13.

American Association of Railway Surgeons, Chicago, Sept. 8-10.

American Clinical and Climatological Association, Skytop, Pa., Oct. 16-18.

American College of Surgeons, Boston, Nov. 3-7.

American Congress of Physical Therapy, Washington, D. C., Sept. 1-5.

American Public Health Association, Atlantic City, Oct. 14-17.

American Roentgen Ray Society, Cincinnati, Sept. 23-26.

Association of American Medical Colleges, Richmond, Va., Oct. 27-29.

Interstate Postgraduate Medical Assembly, Minneapolis, October 13-18.

National Society for the Prevention of Blindness, New York City, Dec. 4-6.

Southern Medical Association, St. Louis, November 11-14.

Society of American Bacteriologists, Baltimore, Dec. 29-31.

Paralysis Splints Available

The National Foundation for Infantile Paralysis has had manufactured a supply of Toronto splints and Bradford frames designed for the early immobilization of weak or paralyzed muscles, but not intended for ambulatory use. The Foundation makes this equipment available to any community for use during epidemics or by those indigent paralysis patients who may be in need of them. The appliances are furnished through county chapters upon request by a responsible officer thereof or where a chapter does not exist through the local health department, hospital or recognized agencies or representatives of the medical profession. There is no charge for these splints and frames except expressage. They will be supplied only as needed, and are not to be stocked in anticipation of local needs. A booklet entitled "Splints", describing in detail the method of distribution and proper use of these orthopedic appliances, can be obtained by writing to the National Foundation for Infantile Paralysis, Inc., 120 Broadway, New York.

Experimental Plan of Having Selectees Examined Only Once by Traveling Board of Army and Civilian Physicians Is Placed in Operation in 19 Northwestern Ohio Counties

A NEW plan, on an experimental basis, of conducting physical examinations of prospective selectees for the United States Army has been placed in operation in 19 Northwestern Ohio counties by the State Selective Service Headquarters.

The basic concept of the trial plan is to subject the selectee to one physical examination by a board composed of Army and civilian physicians. Under the system now in effect throughout the country, including Ohio, the registrant is first examined by the local draft board physician, and if he passes that examination, is later examined by Army physicians at the Army Induction Stations. In the past approximately 12 per cent of the men ordered for induction have been rejected because of physical defects. The purpose of the experimental plan is an effort to prevent some of the difficulties and inequalities under the present plan of examination, particularly involving the rejection of men at the induction stations after they have left their homes and business, expecting to enter the Army.

APPROVED BY WASHINGTON

Evolved by Colonel Howard E. Boucher, chief medical officer for Selective Service in Ohio, and his assistant, Major Claude S. Perry, the experiment has been approved by the Fifth Corps Area Headquarters and the National Headquarters, Selective Service System. Arrangements have been worked out in collaboration with Colonel E. C. Jones, Medical Inspector for the Fifth Corps Area, and after discussion of the proposed plan with local draft officials, examining physicians and chairmen of various county medical society preparedness committees.

Examination centers are located in the armories at Toledo, Lima and Fremont. Counties comprising each area follow: **Toledo**—Lucas, Fulton, Williams, Defiance, Henry, Wood. **Lima**—Allen, Auglaize, Mercer, Van Wert, Paulding, Putnam, Hancock, Hardin. **Fremont**—Sandusky, Seneca, Huron, Erie, Ottawa. The examining teams consist of Army medical officers and civilian physicians selected from the present personnel of local board examiners. The latter are paid on the basis of $15.00 per day. As *The Journal* went to press, examinations had been scheduled for one day in Fremont, two days in Toledo, and two days in Lima.

ADVISORY BOARDS TO FUNCTION

There will be no change in the present system of referring doubtful cases to the Medical Advisory Board. If, during the examination by the medical team, it is found necessary to have additional laboratory or X-ray examinations, the local board will be requested to send the registrant to the proper specialist for further examination and report. A registrant so referred will be recalled for examination and final opinion at the next succeeding day of examination for the area.

In an announcement of the experiment to local boards and examining physicians in the counties concerned, Lt. Col. C. W. Goble, State Director of Selective Service, included the following statement:

"It should be understood by the local boards and examining physicians that this will be operated as a trial method and final adoption of this plan or extension thereof will depend on evidence of its desirability after sufficient trial. The very excellent and effective cooperation of examining physicians to local boards is herewith acknowledged and their appointment as such will continue to remain active.

"It is requested that they continue to function in an advisory capacity to the respective local boards although not required to make general physical examinations pending the tryout of this plan. In other words, they may for the time being, consider this a vacation period."

ADVANTAGES LISTED

Advantages which may accrue under the proposed plan, according to State Selective Service Headquarters, include: (1) It contemplates one examination only, which will be final, except for acute conditions, which may develop in the interval previous to induction. (2) The registrant will be assured that he will be accepted for induction upon order, and will have a reasonable time to close his affairs and be prepared to leave for training. (3) Local examining physicians will be relieved of the embarrassment and criticism of having passed a man who is later rejected. (4) Local examining physicians and local board members will have the responsibility of acceptance divided between them and the Army representatives on the examining board, and at the same time will retain the local representation as provided in Selective Service regulations. (5) This plan should tend to more uniformity in classification. (6) It will avoid duplication of effort in examination, and the confusion and uncertainty now occurring because of dual examinations. (7) Fewer local physicians will have to be used and those who do serve will receive at least partial remuneration for time and professional services given.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Role of Physician Vital in Premarital Examination Law

Members of the medical profession will be confronted with an important responsibility in connection with the administration of the new Ohio law requiring applicants for a marriage license to submit to a medical examination, designed primarily to prevent the marriage of a person having syphilis in a communicable stage. This law, effective August 18, is analyzed in detail in the Legislative Digests, published elsewhere in this issue of *The Journal.* Its provisions should be studied carefully by all physicians.

Success or failure of the premarriage examination law will depend largely on the degree of cooperation and judgment displayed by physicians. If physicians fail to make the required examinations as thorough as necessary or to perform their work in keeping with the spirit and intent of the new law, the desired results cannot be achieved. In a way the reputation of the entire profession is at stake. Naturally, there will be some mistakes in judgment but these will be excusable. However, there can be no alibi for carelessness, wilful violations of the law, and refusal to do a competent job.

Also, the profession must realize that the public will have a watchful eye on it with respect to charges made for the required examinations. The law does not modify in any respect the ordinary relationship between physician and patient. Physicians will be entitled to charge a fair and just fee for each examination, depending, no doubt, on the economic circumstances of the individual examined—the same as in everyday medical practice. Charging of exorbitant fees by even a few physicians will reflect adversely against the entire medical profession and cause public resentment. There are those who suggested writing into the law a schedule of maximum fees which physicians could charge for the examinations. Through the efforts of the Legislative Committee of the Ohio State Medical Association this recommendation was not accepted by the General Assembly. However, the threat of standardizing examination fees through an amendment to the premarriage examination law remains. Members of the medical profession must make such action unnecessary.

Regardless of honest differences of opinion regarding the merits or demerits of this new Ohio statute, physicians have an obligation to meet and owe it to themselves, as well as the public, to see that reasons for justifiable criticism of the profession's part in the operation of the law are minimized, or, better yet, eliminated. The operation of this law is not going to bring about the millenium. But, it deserves a fair trial and public support. A lot of good can be accomplished, even though there may be some loopholes, through the proper degree of cooperation between the public and those providing the professional services. The overwhelming majority of the physicians of Ohio will do the right kind of a job. Against the few who may try to cut the corners the penalty provisions of the law should be invoked.

Ultimately the only way we shall defeat the tragic invasion of state medicine and preserve the freedom and integrity of individual practice will be by each of us doing a better job for the public than even the most rabid proponents of state medicine can claim for their nostrum.—Westchester Medical Bulletin.

Governor Acted Wisely in Renaming Blake To Commission

Governor Bricker is to be congratulated for having reappointed Will T. Blake as a member of the State Industrial Commission. As representative of employees on the Commission, Mr. Blake has served efficiently and honestly. As chairman of the Commission, he has taken the lead in attempting to eliminate weaknesses in the administrative machinery of the Workmen's Compensation System, which have been apparent to the Commission as well as to others directly concerned in Workmen's Compensation matters.

At this particular time, the Workmen's Compensation System needs administrative guidance by men of experience and proven capacity for that important responsibility. Recognizing that Blake meets these requirements, the Governor had no hesitancy in reappointing him. Employees, employers and the medical profession should be pleased at the good judgment used by the Chief Executive.

Those who are quick to criticize the State Industrial Commission—at times for its known shortcomings and on other occasions for situations which are beyond the control of the Commission—should realize that this huge agency has a good many tough problems to contend with and that the Commission's field is not all sweet clover and green pastures. It's easy to criticize when facts are unknown or disregarded.

For example, with curtailed personnel the

Commission is handling just about as many claims at the present time as it did in the boom days of 1929. That year the claims filed with the Commission totaled 261,901. If the present ratio of increase in the number of claims filed each month, compared with 1940, is maintained, the record set in 1929 will be exceeded. In February of this year there was an increase of 24.5 per cent in the number of claims filed with the Commission over the number filed in February, 1940. The increase in March was 23.3 per cent and the increase in April was 35.6 per cent.

Also, that department is finding it increasingly difficult to find competent clerical and professional personnel to fill a few new positions and replace former employees now working in defense industries or who are in military service.

These are just two samples of some of the difficulties which plague the Commission, showing why members on that board must be men of judgment and integrity. The Governor's realization of this fact doubtless prompted him to continue Mr. Blake as a member of the Commission.

No sin will so easily beset you as uncharitableness toward your brother practitioner.—Osler.

Views of Staff Should Be Solicited By Hospital Manager

According to an editorial in *The Cleveland Academy of Medicine Bulletin*, at a recent meeting of the Cleveland Hospital Council, Dr. Geo. Edw. Follansbee, its treasurer, in describing some of the functions of that body, pointed out that "there are not enough practicing physicians in the Council to fill the committee on professional relations". The editrial went on to suggest that member hospitals designate a greater number of representatives from their medical staff to serve on that coordinating body.

This raises the point that too many hospitals are failing to utilize the services of members of their medical staffs in administrative matters, especially at conferences where the point of view of medicine is important and should be considered.

To be sure the management of a hospital, with the exception of small, private institutions, must be handled by those possessing business talents. On the other hand, the business management cannot ignore the medical side of the institution. Whether physician or layman, the hospital manager should give the visiting staff a voice in discussions of administrative affairs. The smoothly operated hospital is the one in which there is agreement, understanding, cooperation and coordination between the front office and the visiting staff. For either quarter to ignore the viewpoint of the other is quite likely to be a fatal mistake.

Give the Younger Men Some Responsibilities, Dr. Lahey Suggests

There was a lot of meat in the two addresses which Dr. Frank H. Lahey, Boston, president of the American Medical Association, delivered at the June session of the A.M.A. in Cleveland. If you haven't read them, dig up the June 7 and June 14 issues of *The Journal of the American Medical Association* and do so. They're worthwhile.

In his address to the House of Delegates, Dr. Lahey made one observation which carries a real message for every medical society and every president of every medical society, especially at the time he faces the responsibility of appointing committees to handle the affairs of the society.

Dr. Lahey told the House of Delegates that over a period of time and during his intimate relationship with many medical organizations of all types, he has been able to develop "some ideas". He then proceeded to offer the following:

"One that has occurred to me is the necessity of selecting young men as representatives in the House of Delegates of the American Medical Association and as members of various important committees of the House of Delegates. One of the greatest mistakes, it has always seemed to me, in the executive management of large affairs has been to put complete control into the hands of an older group of men and to fail to realize that there must be developed, by experience and by contact with problems, a constant supply of younger men. They secure from this experience the ability to take over the reins when the older men no longer are active. It has been my experience to see so many institutions, business and professional, come to a bad end through failure to appreciate this point. It will always be necessary for growing organizations to have fresh points of view as well as fresh, youthful representation, and to develop men interested in the organization side of medicine early in their careers."

Every medical society should take an inventory with this thought of Dr. Lehay in mind. Naturally, he did not mean that the older men who have carried the ball for a society through thick and thin, and have done a swell job of it, should be placed on the shelf or transformed into wallflowers. That would be a foolish mistake. Dr. Lahey's remarks imply, however, that he believes there should be a mixture of older and younger personnel in the administrative and committee activities of a medical society—one group supplying the fruits of judgment and experience, the other energy, enthusiasm, initiative and fresh ideas. There is a happy medium which can be reached—a combination which will give new life to any society no matter how long it has been in a coma. This has been demonstrated on a good many occasions by societies which have had the wisdom to make use of the talents of both the old heads and the young bloods. It's the well-balanced team which knocks off the laurels in sports. The same principle can be, and should be, applied to organization affairs. What's the situation in your medical society? Does it have the proper balance?

When he comes to "practice tomorrow will of necessity be group practice organized around a health station . . .," Dr. Sigerist moves into the sunny fairyland of inexperience. It is a deduction drawn beside the library hearth, not in the night in a New England blizzard.—Connecticut State Medical Journal.

Wishful Thinking Should Be Supplanted By Real Action

Recently the Ohio Institute, a non-partisan research agency on governmental matters with offices in Columbus, completed a four-year study of non-institutional public aid in Ohio for the years 1937 to 1940, inclusive. Interesting data regarding costs, number of recipients, programs, trends, etc., were compiled. The total amounts of money, or its equivalent, furnished to recipients in Ohio under such programs as WPA, general relief, aid for the aged, aid to dependent children, aid to the blind, and several other supplemental plans, were as follows: 1937, $126,000,000; 1938, $223,000,000; 1939, $188,000,000; 1940, $143,000,000; making a grand total of $680,000,000.

The report on this study concludes with the following observations:

"During the past several years, much discussion has concerned the question whether 'relief' is to be temporary or permanent. From the data presented in this report, it is evident that a large part of the public aid total is not of a temporary character. . . . In the light of these facts, it would seem highly desirable that a study be made to analyze the factors now operating to decrease or increase each type of public aid and to forecast as far as possible what provisions should be made, what is required. Especially should the peculiar problems of the mining and marginal agricultural counties receive attention, with a view to formulating a basic remedial plan applicable to them."

As physicians well know, medical care is an important, as well as a troublesome, factor in this whole relief problem. If as the Ohio Institute's report states, public aid in Ohio to a large extent is not of a temporary character, would it not be wise for the medical profession, through its organized societies, to remain alert and prepared?

In some counties, the medical profession has neglected to interest itself sufficiently in public aid programs. There has been a tendency to regard these programs as "temporary" and "experimental". The local medical society has been inclined to pay little, or no attention to the medical aspects of these programs and in so doing has permitted guidance and control to get into the hands of lay administrators.

Some of these aid programs are distasteful to a great many physicians. Some of the criticism directed at them has been justifiable. Doubtless everyone longs for a return to "the good old days" when there were no alphabetical agencies and case workers came at a premium.

But this is not facing the facts. Public assistance, to a greater or lesser degree, is here to stay. For that reason, the medical profession must be prepared on a long-range basis. Each county medical society might just as well make up its mind to this now, as later. By maintaining its present active interest in these affairs or by setting up proper machinery to handle the interests of the medical profession in such programs, the county medical society will be rendering a real service to its individual members. Wishful thinking is merely an anesthetic. An alert committee to represent the profession at the conference table on public assistance questions and programs is what is needed by every county medical society. Ninety per cent of the questions which will arise will be local in scope and character and administration will be primarily a local responsibility. It would be desirable for each county medical society to regard public assistance as a permanent public question about which the medical society must be concerned and to prepare well, and now, to cope with the problems which certainly will arise from time to time.

Our university graduates have far more information and far less understanding than in the colonial period.—Robert M. Hutchins, President, University of Chicago.

Health Lessons At The Fair

The 1941 Ohio State Fair, to be held at the Fairgrounds in Columbus, August 23 through 29, will provide, as it has in the last two years, an opportunity for the State Association to put forth some of its most effective health education efforts. Initial plans were laid by the Bureau of Public Education early in the Summer for this year's exhibit, and at present arrangements have been completed with officials of the Fair to allot to the Association advantageous space in the building which will house the educational exhibits of other public and private agencies.

Past experience, particularly with the highly successful "Quiz Booth" of last year, has proved that a novel and attractive exhibit at the State Fair can do much to dramatize the story of good health and the family physician to the quarter of a million Ohioans who visit the big exposition. Hence, especial efforts are being put forth to stage an educational exhibit under the State Association's auspices which will be both entertaining and instructive for the thousands of Fair-goers who will visit it.

Physicians throughout the state can do their patients a service by suggesting to them that they pay special attention to this health exhibit when they come to Columbus for the Fair.

If we could all remind ourselves several times each day that none of us in any branch of medicine is as great or as important as we think we are, and more important than that, never as great as others sometimes think we are, it would be a fine thing.—Frank H. Lahey, M.D., President, American Medical Association.

Physicians Must Be Control Factor In Vitamin Program

The intensive work which the Ohio State Committee on Nutrition for Defense is doing throughout the state and through its county nutrition councils makes it imperative that physicians be prepared to instruct their patients on how to get an adequate amount of various vitamins and minerals so essential to a state of good nutrition. They must be prepared to demonstrate that all of these things can be gotten in our natural food stuffs. They must be on the alert to teach that good nutrition depends upon good food, properly balanced, good digestion and an adequate amount of physical exercise taken daily. Then they can effectively teach their patients that pills and concentrates of vitamins are medicinal products and should be taken only under the guidance of the medical profession; that they have been prepared for physicians to administer to those who must be on a restricted diet and to those who are already victims of clinical or sub-clinical deficiency diseases.

Ohioans Elected by Sections

Section officers elected at the recent meeting of the American Medical Association in Cleveland include the following Ohio physicians: Dr. Roy W. Scott, Cleveland, chairman, Section on Practice of Medicine; Dr. Derrick Vail, Cincinnati, secretary, Section on Ophthalmology; Dr. A. R. Vonderahe, Cincinnati, vice chairman, Section on Nervous and Mental Diseases; Dr. James A. Dickson, Cleveland, chairman, Section on Orthopedic Surgery; Dr. John T. Murphy, Toledo, secretary, Section on Radiology.

Lima—Dr. H. M. Turk resigned as superintendent of the Lima State Hospital, effective July 31. Dr. E. H. Crawfis, assistant physician at the hospital, was named acting superintendent.

Additional Ohio Medical Reserve Officers Called To Active Duty

The following Ohio medical reserve officers have been ordered to active duty or had their orders revoked during the past month:

Philippine Islands: 1st Lt. Charles Benjamin Armstrong, Cincinnati; 1st Lt. Mark Gardner Herbst, Canton; 1st Lt. Webster Cullen Smyers, Dayton.

Air Base, Charlotte, N.C.: 1st Lt. Isador Miller, Cincinnati; 1st Lt. Edward Francis Hardman, Youngstown.

Air Base, Ft. Wayne, Ind.: 1st Lt. Myron Abraham Freilich, Zanesville.

Ft. George G. Meade, Maryland: Capt. George Lincoln King, Jr., Alliance; Major Arthur G. King, Cincinnati.

Basic Flying School, Montgomery, Ala.: 1st Lt. Oscar Julius Rosen, Cleveland.

Camp Forrest, Tenn.: Capt. Walter Fanelli, Cleveland.

Ft. Hayes, Ohio (Corps Area Service Command): 1st Lt. Henry Sisek, Youngstown; 1st Lt. Thomas Wadsworth Knickerbocker, Cleveland.

Camp Grant, Ill.: 1st Lt. Franklyn Craig Kunz, Akron; 1st Lt. Joseph Louis Modic, Cleveland.

Army Reserve Officers ordered to active duty by War Department: 1st Lt. Harry Leon Katz, Cleveland; 1st Lt. John P. Eichhorn, Cleveland; 1st Lt. Osler A. Abbott, Cincinnati—Ft. Knox, Ky.; 1st Lt. Burt M. Coers, Circleville—Ft. Thomas, Ky.; 1st Lt. John A. Dole, Jr., Ironton—Ft. Benjamin Harrison, Ind.; 1st Lt. Arthur S. Dutton, Put-In-Bay—Ft. Knox, Ky.; 1st Lt. Henry L. Hoffman, Cleveland—Ft. Knox, Ky.; 1st Lt. Cornelius G. Lynch, Jr., Toledo—Ft. Knox, Ky.; 1st Lt. Wilbur McKee, Bryan—Ft. Knox, Ky.; 1st Lt. David George Eisner, Cleveland—Station Hospital, Ft. Buchanan, Puerto Rico.

Orders Revoked: 1st Lt. Robert Richard Bartunek, Shaker Heights, previously ordered to Air Base, Charlotte, N. C.; 1st Lt. Donald Cole Barber, Grafton, previously ordered to Air Base, Ft. Wayne, Indiana; 1st Lt. Victor Ellsworth Hillegass, Akron, previously ordered to Basic Flying School, Montgomery, Ala.; 1st Lt. Philip John Robechek, Cleveland, previously ordered to Air Base, Charlotte, N. C.; 1st Lt. Paul Chrenka, Cleveland, previously ordered to Ft. Thomas, Ky.; 1st Lt. Edward F. Ockuly, Toledo, previously ordered to Ft. Knox, Ky.; 1st Lt. Franklin R. Geiger, Cincinnati, previously ordered to Ft. Benjamin Harrison, Ind.

Cincinnati—At a recent meeting of the Cincinnati Society of Neurology and Psychiatry held at the Cincinnati Sanitarium, Dr. J. D. Reichard, medical officer in charge, U. S. Public Health Service Hospital, Lexington, Ky., presented "An Introduction to Clinical Neurology", a motion picture, with discussion of the clinical material presented.

Do You Know - - -

Lieutenant-Colonel Howard E. Boucher, chief medical officer for Selective Service in Ohio, was recently promoted to the rank of Colonel in the Medical Corps of the U. S. Army.

* * *

There are approximately 1,200 Canadian physicians in active military service, about one-tenth of the members of the medical profession in Canada. It is anticipated that 350 more will be required during the coming year.

* * *

Governor Lehman of New York vetoed a bill which would have provided that physicians and nurses may be compelled to disclose to a legislative committee information obtained by them in their professional capacity.

* * *

In an address at the recent annual meeting of the Ohio Hospital Association, Dr. Robert H. Bishop, Jr., director of the University Hospitals, Cleveland, stated that the Cleveland Hospital Service plan now has 365,000 subscribers, representing better than 35 per cent of the population of the area covered and well over half of the wage earners. He predicted that it will pay 35 per cent of all hospital bills in that area this year.

* * *

The Toledo Academy of Medicine golf tournament was won for the third consecutive time by Dr. Norman B. Muhme, with a low gross of 79 for the Heather Downs course. Other low gross shooters were Dr. R. C. Young, 81; Dr. Boni Petcoff, 82; and Dr. Thomas H. Brown, 83.

* * *

Seven Ohio counties have permanent, active nutrition councils. They are: Clark, Cuyahoga, Franklin, Gallia, Greene, Hamilton and Montgomery. Clark County is headed by Dr. O. M. Craven; Franklin by Dr. Mary A. Graber; Hamilton by Dr. Robert C. Rothenberg, chairman of the nutrition committee of the Cincinnati Public Health Federation; Montgomery by Dr. H. H. Williams. Thirty-seven other counties have recently organized and there are ten more counties in which a nutrition council is in the process of formation.

* * *

The Division of Venereal Diseases of the United States Public Health Service announced on June 12 that analyses of serologic and clinical examinations of 1,070,000 selectees and volunteers, as of April 15, 1941, indicate a total of about 48,500 cases of syphilis. For white selectees and volunteers for whom reports were submitted, the rate was 18.5 per 1,000; for Negroes, 241.2 per 1,000.

Dr. Harry V. Paryzek, Cleveland, President of the Ohio State Medical Association was one of the speakers at the recent dedication of the $1,080,000 Veterans Administration Hospital located at Broadview Heights, near Cleveland. The unit comprises seven buildings and has 269 beds.

* * *

The 1940 census listed 131,669,275 persons in the United States, of whom 8,956,206 were 65 years of age or over.

* * *

Mrs. Margaret H. Rockhill, Cincinnati, co-founder and publisher of the *Medical Woman's Journal* and former secretary and honorary member of the American Medical Woman's Association, died June 6.

* * *

Dr. Harry E. LeFever, Columbus, was one of the ten Ohio University graduates to receive Certificates of Merit at the annual Alumni Association banquet held at Athens during commencement week.

* * *

New officers of the American Society of Clinical Pathologists include Dr. Harry Goldblatt, Cleveland, president-elect, and Dr. Russell L. Haden, Cleveland, vice-president.

* * *

Dr. Milton Rosenbaum, Cincinnati, has been elected a vice-president of the American branch of the International League Against Epilepsy.

* * *

H.R. 4965 as passed by the U. S. Congress, making appropriations for the Army for the fiscal year ending June 30, 1942, contains a provision authorizing the Secretary of War to employ osteopaths as interns in Army hospitals. The authorization is permissive in form and will remain in force for one year.

* * *

Dr. Henri Coutard, formerly of Paris, and more recently of the Chicago Tumor Clinic, has been placed in charge of the new roentgen ray and radium unit of Glockner Sanatorium and Hospital, Colorado Springs.

* * *

Dr. Andre Crotti, Columbus, has created a fellowship in cancer research in the department of pathology at Ohio State University College of Medicine. The award, which carries a monthly stipend of $50, will be used principally for the investigation of cancer resistance and immunity.

* * *

Stanley R. Mauck, executive director, Columbus Bureau of Medical Economics, is the new president of the National Association of Professional Bureau Managers.

In Memoriam

Clement Laird Vallandigham Bell, M.D., Norwalk; Cleveland University of Medicine and Surgery, 1888; aged 78; died July 8. Dr. Bell had practiced in Attica, Fitchville and Norwalk for 53 years. He was Huron County coroner for 16 years and health commissioner of Norwalk for 10 years. During World War I Dr. Bell served in the Medical Corps of the U. S. Army. He was a member of the Masonic Order and the American Legion. His widow, three sons, a brother and a sister survive.

Ralph Milburn Burton, M.D., Toledo; University of Louisville School of Medicine, 1925; aged 42; member of the Ohio State Medical Association and Fellow of the American Medical Association; died June 23. Dr. Burton had practiced in Toledo for 14 years. He was a golfing enthusiast, and had been active in arranging the Inverness invitational tournament. He was a member of the Masonic Order. His widow, a son and his parents survive.

Edward Everett Campbell, M.D., Columbus; Starling Medical College, Columbus, 1907; aged 58; member of the Ohio State Medical Association; Fellow of the American Medical Association; and the American College of Physicians; diplomate of the American Board of Internal Medicine and member of the American Heart Association; died July 4. Dr. Campbell located in Columbus 10 years ago, after having practiced in Logan for over 20 years. He was a member of the staffs of Grant, Mt. Carmel and University Hospitals. His widow, two daughters, his mother, a sister and a brother survive.

Sherman S. Frazier, M.D., Angola, Indiana; Fort Wayne College of Medicine, 1891; aged 76; member of the Indiana State Medical Association; former member of the Ohio State Medical Association; Fellow of the American Medical Association; died June 10. Dr. Frazier practiced in Kunkle, Williams County, for 24 years before moving to Angola in 1916. Surviving are his widow and a daughter.

Martin Luther Hindley, M.D., Monroeville; University of Michigan Medical School; Ann Arbor, 1900; aged 71; member of the Ohio State Medical Association and the American Medical Association; died June 25. A practicing physician in Huron County for 40 years, Dr. Hindley was also prominent in the civic activities of the community. Surviving are his widow, a son—Dr. James M. Hindley, Monroeville—and two sisters.

Cleal Giles Hissong, M.D., Hamler; Eclectic Medical College, Cincinnati, 1915; aged 50; member of the Ohio State Medical Association and Fellow of the American Medical Association; died June 29. A former president of the Henry County Medical Society. Dr. Hissong had practiced in Hamler for 26 years. He had been active in the civic affairs of the community, and at the time of his death was mayor of Hamler, a member of the Board of Education, and commander of the local post of the American Legion. Dr. Hissong served in the medical Corps of the U. S. Army during World War I. He was a Mason. Surviving are his widow, a son, his mother and a sister.

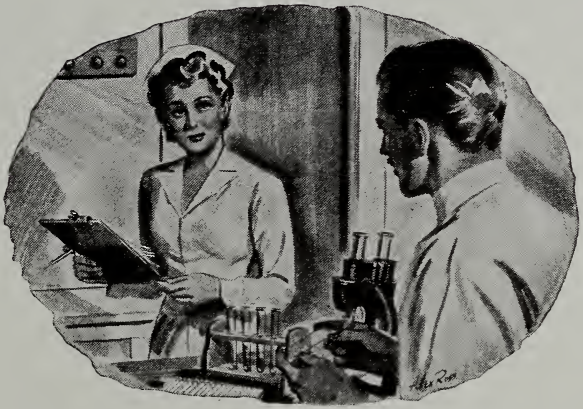
Hugh R. Jeffrey, M.D., Morristown; College of Physicians and Surgeons of Baltimore, Md., 1893; aged 73; former member of the Ohio State Medical Association and the American Medical Association; died June 10. Dr. Jeffrey practiced in Belmont County for 44 years, retiring in 1937 because of ill health. He was a member of the Presbyterian Church. His widow, three daughters, two sisters and a brother survive.

Orville William Kimbell, M.D., Toledo; Toledo Medical College, 1897; aged 69; member of the Ohio State Medical Association and the American Medical Association; died June 9. Dr. Kimbell practiced in Toledo for 44 years. Surviving are his widow, a daughter, a son, a sister and a brother.

Frank Wm. Knittel, M.D., Hinckley; St. Louis University School of Medicine, 1928; aged 41; member of the Ohio State Medical Association and Fellow of the American Medical Association; died June 26. Dr. Knittel had practiced in Hinckley for 10 years. His widow, a daughter, two sons, his mother and a sister survive.

Percy B. Long, M.D., Copley; Ohio Medical University, Columbus, 1898; aged 68; former member of the Ohio State Medical Association and the American Medical Association; died June 14. A life-time resident of Copley, Dr. Long had practiced there for 42 years. During World War I he served overseas as a captain in the Medical Corps of the U. S. Army, and was a major in the Medical Reserve Corps from 1919 to 1929. For many years Dr. Long was a violinist in the Akron Doctors' Orchestra. He was an active member of the Methodist Church, the Grange, the Grange Garden Club and a past-commander of the local post of the American Legion. Surviving are three daughters, a son and a brother.

Lydia McKendree, M.D., Bowling Green; Toledo Medical College, 1892; aged 81; former member of the Ohio State Medical Association and the American Medical Association; died June 15. Dr. McKendree retired 10 years ago. She had practiced in Milton Center and later in



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association with her husband, the late Dr. M. A. McKendree, in Bowling Green. She was a member of the Church of Christ and the Eastern Star. A sister survives.

Roy Carl Rehder, M.D., Mansfield; University of Nebraska College of Medicine, Omaha, 1933; aged 39; member of the Ohio State Medical Association and Fellow of the American Medical Association; died June 23. Dr. and Mrs. Rehder were killed instantly in a head-on collision with a truck while vacationing near Grand Island, Nebraska, his former home. He was president-elect of the Ohio Federation of Public Health Officials and since 1937 had been Mansfield-Richland County health commissioner. He had previously been assistant health commissioner for a short period, and prior to that time practiced in Milwaukee. Dr. Rehder was an active member of the Richland County Medical Society, and Mrs. Rehder was a member of the Woman's Auxiliary. Surviving are his mother, two sisters and a brother.

Samuel H. Sibert, M.D., Wapakoneta; Starling Medical College, Columbus, 1881; aged 83; member of the Ohio State Medical Association and Fellow of the American Medical Association; died June 14. Dean of the Auglaize County Medical Society and a practicing physician for 60 years, Dr. Sibert first practiced medicine in Sidney. After being there for one year, he located in Fryberg, moving to Wapakoneta in 1926. Dr. Sibert was coroner of Auglaize County for 20 years and had also served on the county fair board. He was affiliated with the Masonic, Eagles and Elks Lodges, and was a member of the Evangelical and Reformed Church. Surviving are his widow, two daughters and one son—Dr. A. V. Sibert, West Palm Beach, Florida.

William H. Streitmann, M.D., Oakland, Calif.; Medical College of Ohio, Cincinnati, 1905; aged 61; member of the California State Medical Association; Fellow of the American Medical Association and the American College of Physicians; diplomate, American Board of Internal Medicine; died July 14. A native of Cincinnati, Dr. Streitmann was assistant health commissioner there for several years, locating in California in 1911. He had been president of the Alameda County Medical Society and vice-president of the California State Medical Association. Surviving are two daughters, one son, two brothers and two sisters.

Elmore B. Tauber, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1902; aged 62; member of the Ohio State Medical Association; Fellow of the American Medical Association; diplomate, American Board of Dermatology and Syphiology; member, American Dermatological Association and the American Academy of Dermatology and Syphilology; died June 23. Professor of dermatology and syphilology at the University of Cincinnati College of Medicine, Dr. Tauber was also director of the service in his specialty at Cincinnati General Hospital, Children's Hospital and Jewish Hospital. In 1930 he was chairman of the Section on Dermatology of the American Medical Association. Dr. Tauber began the practice of medicine in Cincinnati nearly 35 years ago, after several years of post-graduate work in Oxford and Vienna. He was a member of Omega Upsilon Phi fraternity, the University Club and the Elks Lodge. His widow survives.

Summer Meeting of Eighth District at Rocky Glen Attended by 250

Dr. Louis Mark and the Rocky Glen Sanatorium were hosts to approximately 250 physicians who attended the annual Summer meeting of the Eighth Councilor District at McConnelsville, June 19. Dr. D. G. Ralston, resident medical director of the sanatorium, was master of ceremonies at the luncheon session.

Following an address of welcome by Dr. Mark, brief talks were made by the following: Dr. Harry V. Paryzek, Cleveland, President of the Ohio State Medical Association; Dr. George F. Swan, Cambridge, Councilor for the Eighth District; Dr. C. V. Davis, Pennsville, member of the State Medical Board; Dr. E. LeFever, Glouster, veteran representative of Athens County in the State Legislature; Dr. Frank Warner, Columbus; Dr. Frank C. Anderson, superintendent of the Ohio State Tuberculosis Sanatorium, Mt. Vernon; Dr. R. H. Markwith, State Director of Health; Dr. W. J. Smith, State Department of Health; J. A. Shaw, Legal Department, State Industrial Commission, and O. P. Van Schoik, chief relief examiner, State Auditor's Office.

The scientific program consisted of an address by Dr. Leon Schiff, associate professor of medicine, University of Cincinnati College of Medicine, on "Hematemesis and Melena, Newer Concepts", and a discussion of "Heart Diseases Treated by Surgical Methods", by Dr. Claude S. Beck, professor of neurosurgery, Western Reserve University School of Medicine, Cleveland.

Dr. A. A. Tombaugh, McConnelsville, presided at the business session, at which Dr. J. L. Webb, Nelsonville, was elected president and Dr. Deane H. Northrup, Marietta, was elected secretary for the ensuing year. The group voted to have no Fall meeting this year.

Toledo—Members of the Toledo National Defense Council, local branch of the Office of Civilian Defense, headed nationally by Mayor Fiorello La Guardia, include Dr. Earl W. Huffer, president of the Toledo Academy of Medicine and Dr. John Lavan, city health commissioner.

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

BUTLER

Seventy-five members of the Butler County Medical Society and its Auxiliary attended a dinner party at the Hotel Manchester, Middletown, Wednesday evening, June 25. Dr. Parke G. Smith, Cincinnati, was the guest speaker.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

MIAMI-SHELBY

Dr. D. M. Glover, chief of surgery, St. Luke's Hospital, Cleveland, spoke on "Modern Treatment of Burns", at the semi-annual joint meeting of the Miami and Shelby County Medical Societies, Thursday, June 12, at the Sidney Country Club. —News clipping.

GREENE

The annual business meeting of the Greene County Medical Society, Thursday, July 3, at the Court House, Xenia, was devoted to a general discussion of organization matters.—Donald F. Kyle, M.D., secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

AUGLAIZE

At a meeting of the Auglaize County Medical Society, Thursday evening, June 26, at the Court House, Wapakoneta, Dr. A. A. Brindley, Toledo, spoke on "Spinal Anesthesia, Surgical and Therapeutic", and Dr. Fred C. Clement, Toledo, discussed "Oxygen Therapy".—Chas. C. Berlin, M. D., secretary.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

MAHONING

Dr. E. H. Cary, Dallas, Texas, former president of the American Medical Association, and chairman of the National Physicians Committee for the Extension of Medical Service, spoke on "Political Medicine", at a meeting of the Mahoning County Medical Society, Friday, June 6, at Youngstown.—Bulletin.

Seventh District

(COUNCILOR: CARL GOEHRING, M.D., STEUBENVILLE)

BELMONT

Members of the Belmont County Medical Society and its Auxiliary held a dinner party at the home of Dr. and Mrs. R. H. Wilson, Martins Ferry, Thursday, June 26.—C. W. Kirkland, M. D., secretary.

TUSCARAWAS

Mrs. W. W. H. Curtiss, Dennison, president of the Woman's Auxiliary to the Ohio State Medical Association, reported on the Cleveland meeting of the Auxiliary, at a meeting of the Woman's Auxiliary to the Tuscarawas County Medical Society, Thursday night, June 12, at the Reeves Hotel, New Philadelphia.—News clipping.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

WASHINGTON

Dr. George M. Lyon, Huntington, W. Va., spoke on "Infantile Paralysis", at a meeting of the

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Washington County Medical Society, Wednesday night, June 11, at the Hotel Lafayette, Marietta. —News clipping.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

New officers of the Woman's Auxiliary to the Columbus Academy of Medicine are: Mrs. George O. Hoskins, president; Mrs. R. S. Fidler, president-elect; Mrs. James H. Warren, vice-president; Mrs. Herbert D. Emswiler, treasurer; Mrs. A. A. Hall, recording secretary; Mrs. John H. Mitchell, corresponding secretary.—News clipping.

KNOX

At a meeting of the Woman's Auxiliary to the Knox County Medical Society, Thursday afternoon, June 19, at the Mt. Vernon Country Club, the following officers were elected for the ensuing year: Mrs. James F. Lee, president; Mrs. O. W. Rapp, president-elect; Mrs. Robert L. Eastman, vice-president; Mrs. Charles B. Tramont, secretary-treasurer.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

HURON

Guest speakers at a meeting of the Huron County Medical Society, Wednesday night, June 11, at Memorial Hospital, were Russell Knoop, supervisor for the Farm Security Administration and Kirkland Sloper, area director for the National Youth Administration.—News clipping.

Additions to Medical Staff of the State Industrial Commission

Five physicians were recently appointed to the staff of the Medical Section of the State Industrial Commission, at salaries of $3,000 per year. They are: Dr. Charles E. Cassaday, Columbus, University of Cincinnati College of Medicine, 1940, internship, Mt. Carmel Hospital, Columbus; Dr. James H. Boyer, Hillsboro, Ohio State University College of Medicine, 1940, internship, St. Francis Hospital, Columbus; Dr. Frank T. Sheean, Columbus, Ohio State University College of Medicine, 1940, internship, St. Francis Hospital, Columbus; Dr. Benjamin Arnoff, Columbus, Ohio State University College of Medicine, 1939, M.A., (anatomy) in 1936, internship and residency, St. Francis Hospital, Columbus; Dr. Harry Sherman, Cleveland, Western Reserve University School of Medicine, 1936, internship, Cleveland City Hospital, three years on staff at Sunny Acres Sanatorium, Warrensville.

Trips to the Altar

Recent marriages of Ohio physicians include the following: Miss Jean Statler and Dr. John F. Beachler, Jr., Piqua; Miss Marian Haag, Elyria, and Dr. Russel N. Brown, Centerville; Miss Mary Burk, Harrison, and Dr. Robert A. Bruce, Tiffin; Miss Elizabeth Maxwell, Akron, and Dr. Paul A. Bunn, Cleveland; Miss Dorothy Cole, Toledo, and Dr. Samuel J. Campbell, Bucyrus; Miss Helen Sosnoski, Ann Arbor, Mich., and Dr. M. S. DeWeese, Kent; Miss Ruth Price, Hubbard, and Dr. John Gibbs, Philadelphia, Pa.; Miss Betty Reichley, Columbus, and Dr. E. B. Gudenkauf, Minster; Miss Mary Elizabeth Bixler and Dr. R. O. Hummer, Toledo; Miss Jayne Hreason, Cleveland, and Dr. George W. Johnston, New Philadelphia; Miss Elsie Jean Thrailkill and Dr. David M. Katchka, Toledo; Miss Ruth Irene Matthews, Chagrin Falls, and Dr. Roger K. Kalina, Cleveland; Miss Florence Stevens, Galion, and Dr. Harlin G. Knierim, Detroit, Mich.; Mary Ann Reeder, Columbus, and Dr. Edward C. Lawless, St. Louis; Miss Isabel Hepler, Mt. Vernon, and Dr. Russell C. Long, Zanesville; Miss Thelma Irene Birt, New Weston, and Dr. Charles R. Lyons, Ansonia; Miss Virginia McClellan, Salineville, and Dr. J. Richard Lutz, North Ridgeville; Miss May Kidd, Columbus, and Dr. Paul G. Meckstroth, New Knoxville; Miss Naomi Ruth Droz, Cambridge, and Dr. Max A. Mendelson, Bellaire; Miss Virginia A. Davenny and Dr. John H. Mowry, Conneaut; Miss Margaret Ellen Rataiczak, Troy, and Dr. Francis P. O'Linn, Detroit, Mich.; Miss Helen Haubert, Marion, and Dr. Paul W. Palmer, Columbus; Miss Jeanne Storing and Dr. William M. Rhodes, Columbus; Miss Lois Neiswander, Pandora, and Dr. Franklin Rodabaugh, Williamstown; Miss Margaret Elizabeth McClean, Boston, Mass., and Dr. John R. Ross, Youngstown; Miss Dorothy Margaret Knostman, Lima, and Dr. Marc J. Schwegman, Ft. Thomas, Ky.; Marion Chapin, Cleveland Heights, and Dr. Edmund F. Schroeder, Shaker Heights; Virginia Ebright, Akron, and Dr. James D. Thomas, Columbus; Miss Harriette DeWeese, Kent, and Dr. Daniel C. Thomson, Ann Arbor, Mich.; Miss Esther Johnson, Amherst, Mass., and Dr. Louis W. Whiting, Cleveland.

Open New Offices

Among physicians who have recently opened new offices in Ohio are the following: Dr. Wendell M. Steele, Newark; Dr. Douglas King, Alliance; Dr. Carl J. Streicher, Canton; Dr. Orville J. Lightizer, Steubenville; Dr. Ned Griner, Circleville; Dr. Paul Hoffman, Portsmouth; Dr. Myron S. Owen, Ravenna; Dr. Kenneth M. Smith, Columbus; Dr. Kendell O. Kennedy, Delaware; Dr. Carl Kumpe, Hillsboro; Dr. Forest C. Hunter, Springfield.

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GYNECOLOGY—Two Weeks Intensive Course starting October 20th. One Month Personal Course starting August 25th. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course starting October 6th. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course starting September 8th. Informal Course every week.

OPHTHALMOLOGY—Two Weeks Intensive Course starting Sept. 22nd. Informal Course every week.

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Buckeye News Notes

Bryan—Dr. R. K. Ameter spoke on "Hospitalization Insurance" at a meeting of the Lions Club.

Bucyrus—Dr. S. J. Campbell spoke on the treatment and prevention of goiter at a meeting of the Business and Professional Women's Club.

Canton—The diploma of Dr. Wylie Scott, from the University of Wooster Medical Department, College of Physicians and Surgeons, Cleveland, 1909, and his license from the Ohio State Medical Board, were stolen from his office on the night of July 15.

Cincinnati—Dr. L. Howard Schriver spoke on "Cancer" at a meeting of the Wilmington Rotary Club.

Cleveland—Dr. J. J. Thomas has been elected president of the Early Settlers Association.

Cleveland—Opportunities for women in the medical profession were discussed by Dr. Grace E. Haskin at a meeting of the Lake Erie College Science Club, Painesville.

Columbus—Miss Elouise Stewart, X-ray technician for Dr. T. R. Fletcher, was awarded the first individual award for an X-ray film exhibit at the annual meeting of the American Society for X-Ray-Technicians held at Hollywood, Calif., recently.

Columbus—Included in the new three-member board of trustees of the Franklin County Tuberculosis Hospital are Dr. H. M. Platter and Mrs. Ralph W. Hoffman, past-president of the Woman's Auxiliary to the Columbus Academy of Medicine.

Canton—Hundreds of friends and former patients thronged Aultman Hospital recently to help celebrate the hospital's fiftieth anniversary.

Dayton—Dr. M. Tischer Hoerner was the guest speaker at a meeting of Sigma Delta Pi, premedical fraternity of the University of Dayton.

Dayton—Dr. and Mrs. C. N. Chrisman recently celebrated their 45th wedding anniversary.

East Cleveland—Dr. Justin C. Tay has been appointed one of the four directors of the American Medical Bowling Association.

Fostoria—The effect of smoking on the human body was discussed by Dr. J. H. Norris at a meeting of the Hospital Guild.

Fremont—Memorial Hospital, which recently paid off a $51,000 mortgage, is considering an improvement program which will require an estimated outlay of $40,000 in the next two years.

Gallipolis—The development and scope of the U. S. Public Health Service was described by Dr. W. Lewis Brown at a meeting of the Rotary Club.

Hillsboro—"What Your County Health Commissioner and Coroner Has To Do" was the subject of an address made by Dr. W. M. Hoyt at a meeting of the Leesburg Lions Club.

Kenton—Dr. J. F. Holtzmuller has been reappointed health commissioner of Hardin County for a two-year term.

Lodi—A campaign has begun to raise $40,000 for a two-story addition to Lodi Hospital.

Lima—Dr. Edward W. Laboe has resigned as superintendent of the Lima District Tuberculosis Hospital to assume the position of associate medical director of the Howell State Sanitarium at Howell, Mich., a post which he held before going to Lima two years ago.

Marion—"Modern Drugs" was the topic discussed by Dr. J. F. Smyth at a meeting of the Greenwood P.T.A.

London—Dr. A. J. Helm, who has just completed a course in public health at the University of Michigan, has been appointed health commissioner of Madison County, succeeding Dr. Frank R. Neff who has been called to active duty in the Medical Corps of the U. S. Army.

Norwood—Dr. William R. Chambers spoke on "Syphilis", at a meeting of the Kiwanis Club.

Old Fort—Dr. C. I. Anders has been re-elected a member of the Seneca County District Board of Health for a five-year period.

Sandusky—Dr. F. M. Teeple has retired from private practice to devote full time to his duties as Sandusky County health commissioner.

Toledo—Dr. John T. Murphy was selected as the 1941 Hickey Memorial Lecturer by the Detroit Roentgen Ray and Radium Society. His subject was: "The Use of X-Ray in the Treatment of Carcinoma of the Skin".

Toledo—An oil painting of the late Dr. Lyman A. Brewer, former chief of staff of Mercy Hospital, was unveiled in the foyer of the hospital at a recent meeting of the staff.

Warren—Following attendance at the Army Medical Service School at Carlisle, Pa., 1st Lieut. A. L. Sparks has been appointed instructor in the Chemical Warfare School and assistant surgeon at Edgewood Arsenal, Maryland. He was formerly stationed at Ft. Sill, Oklahoma, and Ft. Bragg, North Carolina.

Waynesville—Dr. Alfred E. Stout is convalescing from severe injuries received in an automobile accident near Xenia.

Wellston—Dr. H. W. Gillen was injured in an automobile accident near Jackson recently.

Westerville—Dr. Dale E. Putnam was named first lieutenant of the local medical detachment of the Ohio State Guard.

Wooster—"Cancer", was the subject discussed by Dr. Robert N. Wright at a meeting of the Kiwanis Club.

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Examinations for Appointments In Navy Medical Corps

The Surgeon General of the Navy, Rear Admiral Ross T. McIntire, (MC), U. S. Navy, announces the following schedule for examinations for appointments in the Medical Corps of the United States Navy:

Acting Assistant Surgeon for intern training:
October 6 to 9, 1941, inclusive.
January 5 to 9, 1942, inclusive.

Assistant Surgeon:
August 11 to 15, 1941, inclusive.
October 6 to 9, 1941, inclusive.
January 5 to 9, 1942, inclusive.

Examinations will be held at all of the larger Naval Hospitals and at the Naval Medical Center, Washington, D. C. Applications for authorization to take the examination must be in the Bureau of Medicine and Surgery three weeks prior to the date of the examination. Application forms for these examinations will be forwarded by the Bureau of Medicine and Surgery, Navy Department, Washington, D. C., upon request.

Applicants for appointment as Acting Assistant Surgeon for intern training are required to be citizens of the United States of over 21 but less than 32 years of age, members of the junior or senior classes in class "A" medical schools, and to meet the physical and other requirements for appointment.

Applicants for appointment as Assistant Surgeon are required to be citizens of the United States of over 21 but less than 32 years of age, graduates of class "A" medical schools, to have had at least one year of intern training in a hospital accredited for intern training by the Council on Medical Education and Hospitals of the American Medical Association, and to meet the physical and other requirements for appointment.

Acting Assistant Surgeons for intern training are assigned to United States Naval Hospitals which have been accredited for intern training by the Council on Medical Education and Hospitals of the American Medical Association, and after they have completed twelve months of intern training may, if they so desire, apply for appointment as Assistant Surgeon in the regular Navy.

Toledo—Dr. August H. Schade, part-time pathologist at Robinwood Hospital has been appointed to a similar post at the Lucas County Hospital. He succeeds Dr. Joseph R. Kriz, who was called into military service.

Cleveland—Lutheran Hospital recently celebrated its forty-fifth anniversary.

Cincinnati—A portrait of the late Dr. Henry B. Freiberg has been presented to the University of Cincinnati College of Medicine by Mr. and Mrs. Sigmund Freiberg. Mr. Freiberg is a nephew of the late physician.

Public Health Association Elects

Dr. Kennon Dunham, Cincinnati, was elected president of the Ohio Public Health Association at its annual meeting held in Columbus, May 22. He succeeds Dr. Charles A. Doan, Columbus, president for the past two years. Other officers elected were: Floyd A. Rowe, Cleveland, vice-president; Dr. Charles A. Neal, Cincinnati, vice-president; Charles C. Stillman, Columbus, secretary; Chester C. Cook, Columbus, auditor; Carlton S. Dargusch, Columbus, counsel; Thomas H. Dickson, Columbus, treasurer; Hon. John W. Bricker, honorary counsel; Robert G. Paterson, Ph.D., Columbus, executive secretary.

CLASSIFIED ADVERTISEMENTS

Rates 50 cents per line, payable in advance. Minimum charge of $1.00 for each insertion. Price covers the cost of remailing answers. Forms close 16th of the month preceding publication.

WANTED — Assistant physician for industrial work. **C. C. J., care Ohio State Medical Journal.**

WANTED — Assistant for general practice; experience in surgery and obstetrics; 45 years old, or more. Give experience and references. **P. C. H., care Ohio State Medical Journal.**

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One of a series of advertisements published by Parke, Davis & Co. in behalf of the medical profession. This "See Your Doctor" campaign is running in the *Saturday Evening Post* and other leading magazines.

Private Smith reports for Sick Call

PRIVATE TOM SMITH is feeling a little under the weather.

If he were back in civilian life, the chances are he'd say, "I'll be all right in a little while," and he'd show up for work as usual.

But in this man's Army of ours, a soldier who feels below par is required to report for "Sick Call," even if he thinks there's nothing much wrong. Private Tom Smith is simply obeying orders.

Because of this wise institution known as "Sick Call," our Army doctors have an opportunity to combat illnesses at the very start and are usually able to prevent them from edging over into the danger zone. This is one of the reasons why the standard of health in our Army of 1941 sets an all-time high.

In this there is a valuable lesson for many a civilian . . .

We're thinking now of the man who permits himself . . . and his family . . . to run risks which no soldier is allowed to take. We're thinking of the man who says, "If I don't feel better tomorrow, I'll see the doctor." But will he? And when he does, will it be too late? Too late to prevent a serious illness, or too late to gain the advantage of time in treating a disease already contracted.

So why not establish the "Sick Call" system in your household? Stomach ache, you know, is sometimes the first warning of appendicitis; a sore throat may be the forerunner of a condition which requires expert attention. When you, or any of your family, develop even a seemingly minor ailment, don't waste time which may be precious.

Call your doctor, and let *him* decide whether or not the ailment is trivial—and what should be done about it. He knows—you don't. Report for "Sick Call" promptly Copyright, 1941, Parke, Davis & Co.

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Seventh District Meeting Held at Steubenville on May 22

Approximately 80 physicians attended a meeting of the Seventh Councilor District of the Ohio State Medical Association at the Steubenville Country Club, Steubenville, May 22. Following golf in the morning and afternoon, a scientific program was presented by three members of the faculty of the Ohio State University College of Medicine. Dr. George I. Nelson, associate clinical professor of medicine, spoke on "The Endocrine Regulation of Carbohydrate Metabolism". Dr. Emmerich von Haam, professor of pathology, discussed "The Clinical Value and Interpretation of Hormone Assays in the Human". The program closed with an address by Dr. Philip J. Reel, professor of surgery (gynecology), on "What May We Expect by the Use of Commercial Endocrine Products". The speakers were introduced by Dr. F. B. Harrington, Steubenville, president of the Jefferson County Medical Society. Arrangements were in charge of Dr. John Y. Bevan, Steubenville.

Openings in West Virginia

The Merit System Council of West Virginia announces that a number of unassembled examinations for medical and other professional positions in the field of public health will be held in the near future. Included are a number of positions in the West Virginia State Health Department, including: chief of medical services; ophthalmologist; director of county health work; director and assistant director maternal and child hygiene; director and assistant director, communicable diseases; director, vital statistics; director, industrial hygiene; assistant director, tuberculosis, venereal disease consultant; senior and junior health officer; health officer trainee. Salaries range from $400 to $200 per month. Residence in West Virginia has been waived but residents of that state may be given preference in appointments. Complete information may be obtained by addressing Carl M. Frasure, supervisor, Merit System Council, Morgantown, W. Va.

Chest Physicians Establish Ohio Chapter

The Ohio Chapter of the American College of Chest Physicians was organized at the annual meeting of the College held at Cleveland, May 31-June 2. Dr. Louis Mark, Columbus, was elected president; Dr. John H. Skavlem, Cincinnati, vice-president; and Dr. Joseph B. Stocklen, Cleveland, secretary-treasurer. The Ohio chapter plans to meet annually at the time and place of the annual meeting of the Ohio State Medical Association. Dr. Joseph C. Placak, Cleveland, is regent for the College for district comprising, Michigan, West Virginia, Tennessee and Ohio, and Dr. Mark is governor of the College for Ohio.

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The Physician's Bookshelf

"Principles of Genetics", by E. Grace White, Ph.D. ($2.50. *C. V. Mosby Company, St. Louis)*, is an excellent text on the subject by the professor in Wilson College. It is the kind of book that we doctors should read in an attempt to bring ourselves up to date before we discuss human inheritance.

"Night Raid", by Eugene Lohrke ($2.00. *Henry Holt and Company, New York City)*, is a deeply felt tribute to the people of Britain, indomitable in the face of disaster as seen through the eyes of an American physician who had come to practice medicine in Britain. The author is a well-known newspaper man who since 1934 has had his residence in Sussex. It is a stirring tale told with sympathy and describes four hours in the life of a doctor in the midlands on a night when the Germans came over.

"Textbook of Medicine", by Various Authors. Edited by J. J. Conybeare, Physician to Guy's Hospital ($7.50, 5th edition. *Williams and Wilkins Company, Baltimore)*, appears two years after the first edition in spite of the war. This speaks for its value. A considerable part of it is new material and much of the old has been rewritten, especially that dealing with the sulphonamide group of drugs, blood transfusions and gastroscopy. It is all written with the typical British clarity and conciseness.

"Ann Bartlett: Navy Nurse", by Martha Johnson ($2.00. *Thomas Y. Crowell, New York City)*, is a story which takes our heroine through her training in General Hospital in Kansas, six months' probationary period in a hospital in Philadelphia, thence to Paris Island, duty on a hospital ship, service at a naval base in Hawaii. The author is from a regular navy family and tells most sympathetically her story of the broadening views of a small town girl as she served in the navy and her deep feeling for her country and mankind.

"The Practice of Clinical Psychology", by Stanley D. Porteus ($3.25. *American Book Company, New York City)*, presents an epitome of the author's actual practice in psychology. It presents first-hand knowledge with a practical rather than a scholarly aim.

Brucellosis (Undulant Fever) Clinical and Subclinical, by Harold J. Harris, M.D., with a foreword by Walter M. Simpson, M.D. ($5.50. *Paul B. Hoeber, New York City)* is a welcome volume on the disease of which we have just become conscious in our diagnostic work. Fortunately, the author has placed the emphasis on clinical observation and addresses his text to his fellow general practitioners. This book will take its place as a classic in the library of diagnosti-

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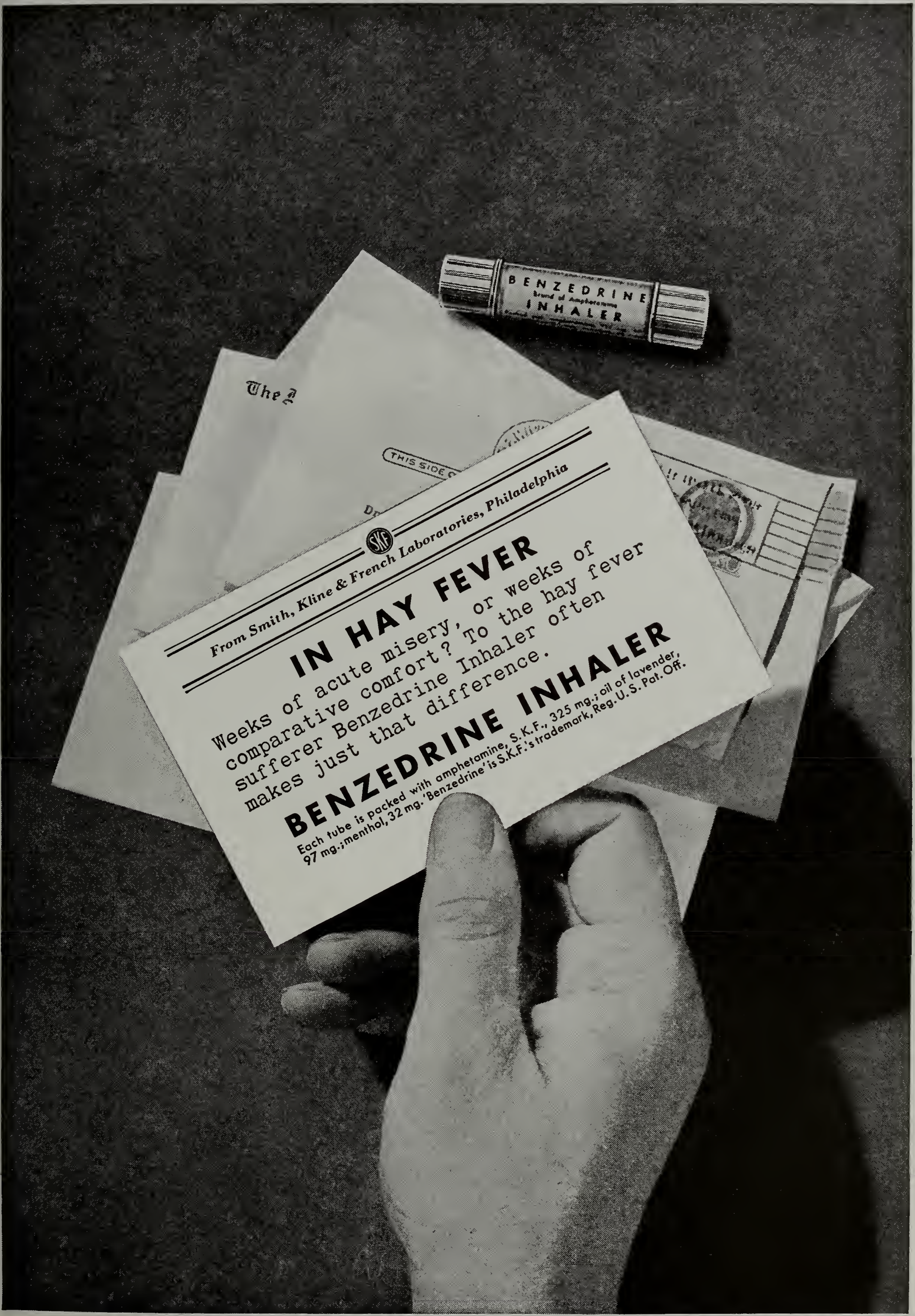

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cians and family physicians. It stands as a fine example of what an alert physician, practicing in a rural area can do for Medicine.

A Manual of Allergy, by Milton B. Cohen, M.D. ($2.00. *Paul B. Hoeber, New York City)* is an attempt to produce a practical, concise, guide book for the everyday use of the family physician. All who know the author respect his clinical judgment and admire his ability to get at the essentials. This book is just what we have the right to expect from him. The evaluation of drugs is invaluable and the discussion of physical examinations of the allergic patient cannot be found in any other book on allergy.

A Textbook of Ophthalmology, by Sanford Gifford, M.D. ($4.00. Second edition, *W. B. Saunders Company, Philadelphia)* presents the essentials of the subject, improved over the first edition of a few months ago.

Medical Manual of Chemical Warfare, reprinted by permission of the Controller of His Britanic Majesty's Stationary Office. First American edition. ($2.50. *Chemical Publishing Company, Inc., Brooklyn, New York)* is designed for use of the medical officers of the defense.

Essentials of Endocrinology, by Arthur Grollman, M.D. ($6.00. *J. B. Lippincott Company, Philadelphia)* is an authoritative, critical evaluation of all important aspects of the subject. Such a book is much needed.

Synopsis of Diseases of the Heart and Arteries, by George R. Herrman, M.D., ($5.00. Second edition. *C. V. Mosby Company, St. Louis)* has brought this valuable manual up to date. There is much to be said for a well executed synopsis of such a broad topic as this.

Military Medical Manual, Fourth edition (Revised), second printing, *(Military Service Publishing Company, Harrisburg, Pennsylvania)* is the Medical Manual of the United States Army.

Prepayment Plans for Medical Care by Franz Goldman, M.D. (25 cents. *Joint Committee of the Twentieth Century Fund and the Good Will Fund and Medical Administration Service, Inc., New York)* might be used as an elementary and condensed text by anybody beginning the study of the whole field of organized plans for the prepayment of medical care. It has relatively less value, however, for those interested chiefly in medical care plans which permit the free choice of physician, for Part II of the book is devoted entirely to a comparative study of five different plans which are based on the group practice principle. The fore part of the book considers briefly the various fundamental problems and principles evolved in the establishment of prepayment medical care plans. Attention is given to Michigan Medical Service, Inc., as an example of

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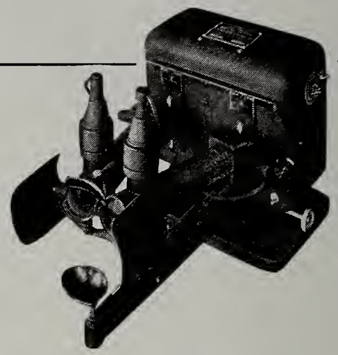

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- ☐ Proc. Soc. Exp. Biol. and Md., 1934, 32, 241-245—" Pharmacology of Inflammation: III. Influence of Hygroscopic Agents on Irritation From Cigarette Smoke."
- ☐ N. Y. State Jour. Med. 1935, 35-No. 11,590—"Irritating Properties of Cigarette Smoke as Influenced by Hygroscopic Agents."
- ☐ Laryngoscope, 1935, XLV, No. 2, 149-154—"Some Clinical Observations on the Influence of Certain Hygroscopic Agents in Cigarettes."
- ☐ Laryngoscope, 1937, XLVII, 58-60—"Further Clinical Observations on the Influence of Hygroscopic Agents in Cigarettes."

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the type of plan organized and operated by a medical society. There is also a set of appendices which includes forms used for the analysis of costs and a table of comparison for the five plans described in Part II.

Coffee—A Collection of Medical Abstracts with a foreword by Milton A. Bridges, M.D. (Gratis. *Pan-American Bureau, New York)* is a compendium ranging from the ancient to the modern by which you can familiarize yourself with the variety of opinions.

The Growth of Bone, Muscle and Overlying Tissue as Revealed by Studies of Roentgenograms of the Leg Areas, by Harold C. Stuart, M.D., Penelope Hill and Constance Shaw *(Society for Research in Child Development, National Research Council, Washington, D. C.)* sets up the norms for further study.

Essentials of Dermatology, by Norman Tobias, M.D. ($4.75. *J. B. Lippincott Company, Philadelphia)*, is a very clear and concise treatise which should prove very helpful for review and hasty reference, especially for those of us who are none too sure of our dermatology.

PAMPHLETS

Lake County Landmarks. Writers' Project, W.P.A., is an attractive 35-page pamphlet and describes 43 landmarks including the Willoughby Medical College, River Street and Euclid Avenue in Willoughby, now occupied by the High School.

Report of the Blood Transfusion Association Concerning the Project for Supplying Blood Plasma to England, which has been carried on jointly with the American Red Cross from August, 1940 to January, 1941. Apply Blood Transfusion Association, 2 East 103rd Street, New York.

Services, Facilities, and Costs of Medical Care and Hospitalization for Township Relief Cases, prepared by Unemployment Relief Commission, Indianapolis, Indiana (apply Indiana office, U.R.C.) contains much valuable information on the subject.

Techniques of Conception Control by Robert L. Dickinson, M.D., and W. E. Morris, M.D. ($0.50. *Williams and Wilkins Company, Baltimore)*. Fifty thousand copies of the first edition are now in the hands of physicians and this second edition is the practice manual of the Birth Control Federation of America, Inc.

Merchants in Medicine, by E. M. Josephson, M.D. ($1.50. *Chedney Press, New York)*, is an attack on organized medicine by the author of "Near-Sightedness is Preventable", "Glaucoma and Its Medical Treatment".

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 September, 1941 No. 9

JONATHAN FORMAN, M.D., *Editor*

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Leptospirosis Icterohemorrhagica (Weil's Disease)

Report of Three Cases

HARRY F. DEUBEL, M.D.

The Author

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LEPTOSPIROSIS icterohemorrhagica, or Weil's disease is an acute, specific infectious disease caused by the leptospira icterohemorrhagiae. It has an acute onset.[1] The principal signs of Weil's disease are fever, chills, prostration, headache, gastrointestinal symptoms, severe muscular pains especially in the calves of the legs, symptoms of an acute nephritis, jaundice, and hemorrhage. Other signs may be present, and all of the above findings may not be present. Thus, jaundice may or may not be present. The disease may be endemic or it may be epidemic.

Leptospirosis icterohemorrhagica, or Weil's disease is not a recently discovered disease. In 1800 Larrey in his Memoirs described an epidemic of icteroid typhus among the soldiers of Napoleon in Egypt. The clinical history of icteroid typhus corresponds closely with that of Weil's disease. Since that time similar epidemics have been reported in the literature. It is not intended to review the history of Weil's disease. However it may be well to review enough of its history to show that, early, a spirochete was considered to be the causative agent; that later, the spirochete was denied any role in the production of Weil's disease, and that finally a spirochete was proved to be the infecting agent.

As early as 1852, Griesinger[2] observed a similar disease in Egypt which he named bilious typhus. He stated the cause of the disease was a spirochete. Weil[3] reported the presence of the disease in Europe in 1886. Kartulis,[2] of Alexandria, reported in 1889 that he had observed over 150 cases, and that the cause was a spirillum. In 1892 Fiedler described in detail the condition and divided its course into three stages. He said the condition should be named Weil's disease because it was a disease sui generis, and because Weil was the first to describe it. Fiedler held that Weil's disease was distinct from icteroid and bilious typhus and recurring rever because they were caused by spirochetes, while Weil's disease was not. Fiedler said the cause of Weil's disease was unknown, but predicted that when it was discovered, the cause would be found in decaying organic material. Neelsen,[2a] Fiedler's colleague found a bacillus in Fiedler's fatal case of Weil's disease. However, after injecting it into apes and guinea pigs, he denied the bacillus the role of causative agent.

Stimson,[4] in 1907 is said to have found a spirochete in sections of kidney from a fatal case of Weil's disease. He named the organism spirocheta interrogans. It remained for the Japanese workers to prove that a spirochete was the cause of the disease. In 1913, Inada and Ido[5]

Read at the staff meeting of Mercy Hospital, Hamilton, Ohio, May, 1940.

reproduced the disease by injecting infected blood into laboratory animals. In 1914 they isolated the spirochete and named it spirocheta icterohemorrhagiae. During the World War, Huebner and Reiter[6] reproduced the disease in laboratory animals by injecting infected blood. The organism they isolated was named spirocheta nodosa because of its appearance. Two other German workers, Uhlenhuth and Fromme[7] accomplished the same end, but they named their organism spirocheta icterogenes.

During this time Japanese workers such as Inada, Ido, Hoki, Ito, Wani, and Kaneko[8,9,10,11,12] worked out the epidemiology of the disease. They pointed to the rat as the reservoir of infection. They determined the incubation period, the modes of transmission of the disease, and the distribution of the organism in the various organs of the body at the different stages of the disease. They demonstrated antibodies in the blood of infected animals, and produced an antiserum for treatment. They pointed out the occupations in which infections frequently occurred, and the conditions conductive to the survival and propagations of the spirochetes outside the body.

During the last World War, leptospirosis icterohemorrhagica or Weil's disease was found among the soldiers of the Allies[13] as well as among the troops of the Central Powers.[6] Since that time cases of leptospirosis have been reported from all parts of the world.

The leptospira belongs to the spirochete group.[14] It is a tightly coiled organism with the ends bent to form hooks. The average length is 6 to 9 mu, and the width .1 to .3 mu. Larger and smaller forms may be found. It moves by spinning on its long axis, and by a sort of undulating movement. At times, the movements remind one of the wriggling of an earthworm. It grows on Verwoort's medium, Schuffner's modification of Verwoort's medium, 10 per cent rabbit serum alone or in conjunction with nutrient broth. The Ph of the medium should be 6.8 to 7.2. It grows well between 25 and 30 degrees centigrade.

MANY STRAINS OF LEPTOSPIRAE

There are many strains of leptospirae. Many of these strains produce different forms of the disease. Again one strain may produce two forms of illness. The leptospira icterohemorrhagiae produces leptospirosis icterohemorrhagica or Weil's disease, and meningitis leptospirosa.[15] Seven day fever and harvest fever (Japan) are caused by the L. hebdomadis[16] and L. autumnalis[17] respectively. Mud fever or summer influenza (Germany) is caused by L. grippotyphosa.[18] Canicola fever is caused by L. canicola.[19] In the United States,[20] canicola fever has been reported in California.

The rat is the principal reservoir of infection. To a less extent, the dog may serve the same purpose.[10] Leptospirae are excreted in the urine of infected animals, and this urine contaminates food, water and soil. By means of these, leptospirae come in contact with humans or susceptible animals, and thereby the infection is spread. Leptospiruria takes place during the later stages of the disease. The leptospiruria of the dog is for a limited time only,[20] while that of the rat probably lasts for the remainder of its life. Dogs can be infected by L. icterohemorrhagiae or L. canicola while the rats are infected only with L. icterohemorrhagiae.[20] The Japanese noticed that the infection was more prevalent in regions with an alkaline soil than in regions with an acid soil. Again, infections were more numerous in damp places than in well drained or dry places. Leptospirae gain entrance into the body through the mucous membranes of the nose, throat, tonsils and eyes, also through abraded skin or even through unabraded skin.

MANY ANIMALS BECOME INFECTED

Besides the rat and dog, many animals are known to become infected with leptospirosis. Pigs,[21] horses,[5] foxes[22] have been reported to have leptospirosis. L. icterohemorrhagiae is pathogenic for guinea pigs, but L. canicola is not so pathogenic.[5] Humans can be infected with canicola fever, but canicola fever is not fatal to humans.[5]

Infections from infected water, soil, or food arises in many ways. Drinking infected water may cause the disease.[23] Fishing in infected water has been reported as a cause of contracting the disease.[25] Accidental falls[5] into contaminated water cause a large number of cases of the disease in the Netherlands. A large number of cases from swimming in infected water have been reported.[5] Men have contracted the disease from standing, marching, and digging in infected soil. Thus many occupations are concerned. Miners,[11] soldiers,[13] sewer workers,[24] fishermen,[25] butchers,[1] rice field workers,[5] and sugar cane cutters[5] furnish the majority of cases of occupational origin. Food may be contaminated directly by contact with rats or through the medium of infected water or soil. Cases of Weil's disease are much more frequently contracted through the medium of infected water than through direct contact with rats.[5] Laboratory infection is contracted by wounding some part of the body by a laboratory utensil which was contaminated with leptospirae, or by handling infected rats.[5] Males are more frequently infected than females.[5] This holds for humans and for dogs.[20] Greater occupational hazards may account for the predominance of cases in men over those of women. The greater number of cases in male dogs has been attributed to the habit of male dogs smelling the urine of other dogs.

More cases occur during the warm months of the year than during the cold months.[5,20] Cases, however occur during every month of the year. Young people[5] are more apt to contract the disease, although no age can be said to be exempt.

The Japanese[9] give the incubation period as five to seven days. In Europe, the incubation period has been determined exactly due to knowledge of the exact day of exposure, v.g. laboratory infections. The average incubation period according to Welch-Sorgdrager[5] is 9.6 days with most frequent day being the tenth day.

STAGES OF THE DISEASE

It has been customary since the time of Fiedler[1] to divide the course of the disease into three stages, viz., (1) the febrile period, (2) the icteric stage, (3) the convalescent stage. This is an arbitrary division, since the stages are not clear cut, and in any given case they overlap. The usual length of the illness is about three weeks, although the convalescent period may extend over a period of months.

The onset of the illness is sudden. There is high fever from the beginning. This is of the continuous type for six or seven days. Later there may be wide fluctuations of the temperature. The pulse is usually rapid, 110 to 130. There is headache which may last into the later stages. Gastrointestinal manifestations such as nausea, vomiting, diarrhea, or constipation may be prominent at the onset. Chills are frequent at the beginning and may be repeated. Usually by the third day, muscular pains appear. Characteristically they are in the calves, and are severe especially on local pressure. Pains in the muscles of the thighs, back, and arms are also frequent. The face is reddened and has a puffy appearance. The conjunctiva are injected. Herpes may appear on the lips at an early stage or later. Nose bleeds may occur early or in the later stages. The tongue is dry and coated, with edges and papillae red. The tonsils are red and swollen. Swallowing may be difficult. The regional glands are swollen and tender. There may be bronchitis and pneumonia, but neither was present in the cases seen here. The liver edge is tender, the upper abdomen is also tender. Later the liver and spleen enlarge. There is an oliguria. The urine is dark, of high specific gravity, and contains albumen, casts, bile pigments and red blood cells. The stools are bile stained. There is a leucocytosis, and at times there is an eosinophilia.[5] The differential count shows a shift to the left. There may be some reduction of red cells, hemoglobin and platelets towards the end of the first stage. The sedimentation rate is increased. Late, there is increased fragility of the red cells. The chlorides and urea are increased in the blood.

Death rarely occurs during the first stage.[9] It is during the first stage that the leptospirae are found in the blood, and this is the time the disease can be reproduced in animals by injecting the blood. Antibodies begin to appear in the blood about the fifth day. Hence the diagnosis can be made in the first stage by injecting the patient's blood into a guinea pig, or by the lysis-agglutination test. By the tenth day, the leptospirae disappear from the blood due to the action of the antibodies.

Jaundice appears from the third to the sixth day of the disease.[1] The most frequent day for its appearance is the fifth day. The jaundice may range from a light tint to a deep orange color. Usually towards the end of the first week, the temperature may show fluctuations, and usually becomes normal in the second week. However, the fever may reappear if there is a relapse. The Japanese[9] called this the after-fever, as they denied the presence of relapses. As the fever subsides, the jaundice becomes more intense. The liver and spleen continue to enlarge. It is during the icteric stage that hemorrhage becomes a troublesome feature. Herpes may appear for the first time. The herpes may become hemorrhagic (case 3). Nose bleeds may occur at this time, if not present previously. Hemoptysis, hematuria or even intestinal hemorrhages may occur.[5] In women profuse metrorrhagia or menorrhagia (cases 1 and 3) may occur. A rash may appear. This rash may be macular, maculopapular, urticarial, or hemorrhagic.[5] If the case is progressing well the renal symptoms may improve. On the other hand, the nephritis may become worse. Myocardial weakness may appear for the first time. Iritis, irocyclitis, optic neuritis, or peripheral neuritis may complicate the illness at this time.[5] Laboratory work shows the jaundice is hepatogenous to a large extent. The Van den Bergh test may be direct, indirect or biphasic. The icteric index is high. Leptospiruria begins in this stage. Hence if animal inoculations are contemplated late in the icteric stage, centrifuged urinary sediment should be used.

Death may occur during the icteric stage.[9] Uremia, and myocardial insufficiency are the causes of death. As can be seen from the above description, many of the symptoms of the icteric stage had their beginning during the febrile stage, but reach their greatest intensity during the second stage.

THE CONVALESCENT STAGE

The convalescent stage is characterized by an amelioration of the symptoms. The headache and myalgias disappear. The jaundice disappears, and the hemorrhages become less or cease. The liver and spleen return to normal. The urine is voided freely and the urine becomes normal. The blood pressure increases to normal. The temperature is often subnormal. However, anemia and emaciation are often present. Weakness is still marked. Relapses may occur.

The complications that occur most frequently have already been mentioned. Leptospirosis is often associated with other conditions. It often occurs in liver diseases and along with suppurative conditions.[9] It has been found along with typhoid, and paratyphoid fevers[5] and malaria.

The mortality varies. In epidemics, the mortality may be 30 per cent.[9] In endemic cases the mortality seldom exceeds 10 per cent.[5] The use of serum in the hands of the Japanese reduced the mortality in an epidemic from 30.6 per cent to 18.3 per cent.[26] The mortality in jaundiced cases is greater than that of anicteric ones.[5] Myocarditis or uremia make the prognosis more grave. Old age is not favorable. Association with other diseases also increases the danger.

LEPTOSPIROSIS MAY BE OVERLOOKED

In this region leptospirosis may be easily overlooked. This is particularly so in the anicteric cases and in those cases where the hemorrhagic tendency is slight. Streptococcic infection of the throat, influenza, typhoid, and paratyphoid fevers, undulant fever, menigimus, epidemic or simple catarrhal jaundice, acute yellow atrophy of the liver are conditions that may cause confusion in this locality. So as not to miss the diagnosis of Weil's disease, the physician must always consider its possibility in the differential diagnosis of acute infectious diseases. A history of contact with rats or rat excreta, of association with a sick dog should always make one suspicious of leptospirosis. In any case that offers the possibility of Weil's disease, laboratory work should be done to disprove or confirm the presence of Weil's disease.

Dark field examination of the patient's blood or urinary sediment (according to the day of illness) may at times help. However, it is not trustworthy. The blood or urinary sediment may be stained with Giemsa or Fontana stains. This also is not only laborious, but also untrustworthy. Animal inoculation is more trustworthy. Small guinea pigs may be inoculated with blood or urinary sediment. After death, the pig should be autopsied. Dark field examination of the organs can be made. The organs can also be cultured, or they may be stained by the Levaditi method, and leptospirae looked for in the sections. Animal inoculations are of no value clinically. Recovery or death would occur before the diagnosis was established. Animal inoculation assists only in making an exact diagnosis. For clinical purposes, the most satisfactory means of diagnosis is the agglutination test. H. C. Brown[27] has described a rapid presumptive test for Weil's disease. The porcelain-plate method[20] is more accurate but takes a longer time to perform. The agglutination test may be positive as early as the fifth day. The agglutination test remains positive for at least six months and probably for a year or more. It is known there are at least two strains in the United States, viz., the leptospira icterohemorrhagiae and the leptospira canicola. Hence in an agglutination both antigens should be used for exact diagnosis.

The general treatment of Weil's disease is much the same as for any other acute infectious disease. Bed rest in a well ventilated room is indicated. The diet should be light with plenty of fluids. If the fluid intake is not sufficient orally, fluids should be administered subcutaneously or intravenously. Hartman's solution and glucose solution may be administered intravenously if there is no contraindication to the intravenous route. The strength of the glucose solution may be varied. If diuresis is desired, the 25 per cent or the 50 per cent solution may be used. If fluid is the only indication, the 5 per cent solution may be used. Insulin may be used with the glucose if needed. Ice bag to head, and hydrotherapy are indicated in hyperpyrexia. Codein and aspirin give some relief from the headache and the myalgias. Barbiturates are often needed for sleep or sedation. Cardiac drugs may be needed for myocardial weakness. Oxygen may be useful if there is pulmonary edema. Liver, iron and vitamin B are indicated for the anemia. Blood transfusions offer a means for increasing the red cell count rapidly. They seem to have a beneficial effect on the hemorrhages. Vitamin K, likewise, seems to have a favorable effect on the bleeding. Mandelic acid and ammonium chloride may be given with the hope that they may control the leptospiruria.

In the past, many drugs have been used with the hope that they would act as leptospirocides. Arsphenamine, and the other arsenicals have been employed but unsuccessfully.[9] Sulfanilamide has been used but with no great amount of success. In animals sodium bismuth tartrate and yatren[28] or sodium bismuth tartrate alone have been used with some measure of success. Two of the cases here were treated with sodium bismuth tartrate, but no change in the course of the disease was noted.

The specific treatment is immune serum. This should be given early and in full doses, i.e., 30 to 60 cc. at a dose. So far as I can ascertain, there is no commercial serum now available in this country.

PROPHYLAXIS

Prophylaxis concerns itself with the extermination of rats and the isolation of convalescent dogs. In the home, food should not be permitted to lie around where it may attract rats. Metal garbage cans should be used and be securely covered. Buildings should be rat-proofed. Wherever possible, marshy or damp infected places should be drained. Workers in infected regions should wear rubber hiptop boots, and wear rubber dipped gloves. Where large numbers of men are concerned, active immunization might be considered. This consists of two intravenous injections of dead leptospirae at close intervals.[5] Infected or convalescent dogs should be quarantined for the period of the leptospiruria.

The number of known cases of leptospirosis in this locality is small. The actual number may be larger. The three cases presented in this paper gave positive animal inoculation and positive agglutination tests with a known culture of L. icterohemorrhagiae.[30] Four other cases were seen which gave positive animal inoculations but which have not yet had an agglutination test. At the time of their illness, no culture was available for the test. Later when a culture was at hand, the patients could not be traced to obtain a specimen of blood for a test.

Twelve rats have been examined. Of these, one had Weil's disease. One dog was found with leptospirosis. A specimen of blood from a male cocker spaniel gave a positive (1:500) agglutination test. A clinical diagnosis of leptospirosis had been made by the veterinarian from the physical findings and the history that the dog had eaten the carcass of a rat. The dog died a few days after the test was made.

From this, it can be seen that a human, canine, and murine leptospirosis exists in this community. The canine form was probably L. icterohemorrhagiae. The agglutination test was done with L. icterohemorrhagiae but with a low dilution one could not say from the test which form was present due to possible cross agglutination. However with the history of rat contact the odds are in favor of L. icterohemorrhagiae. Rats are not infected with L. canicola.

CASE REPORTS

Case 1. A white female, married, age 27 years, was seen August 5, 1937. She had been ill all day. Her illness began with chills, fever, and headache. She was nauseated and vomited several times. She said she felt so weak that it was an effort to turn in bed. She fainted on the floor on her way to the bathroom. Her past history revealed no serious illnesses. She was thought tubercular following the birth of her child 10 years previously. X-rays and a thorough check-up showed no evidence of tuberculosis. Since then she was thin, but felt well until her present illness. Following this labor she had menstruated every 30 days, and had some pain at this time. The flow was scanty and lasted three days.

Her temperatutre was 104 1/5; pulse 128, and respirations 32. Her face was red and seemed swollen. The conjunctivae were injected. Throat was red and swollen but there was no exudate. The cervical glands were tender. Chest and heart seemed normal. The abdomen was normal except for a slight tenderness in upper portion. Movement or pressure over lower extremities caused pain. Her temperature remained high with a slight morning remission. The muscular pains increased in severity. On the third day her abdomen was slightly jaundiced. This jaundice gradually spread over the body and increased in intensity until a deep orange color. The urine showed albumin and 150 R.B.C. to each h.pf. W.B.C. 15,200; Diff: 87 per cent, polymorphs 11 per cent lymphs and 2 per cent eosinophiles; Hb 74 per cent—R.B.C. 3,900,000. When questioned about the output of urine, she stated she voided only once or twice a day and in small quantities. The following day she had bleeding from the nose and her menses began although she was not due for a week. The flow was profuse and lasted five weeks. On the eighth day her temperature reached normal for the first time. The temperature then returned to 101 2/5 where it remained for three days. Thereafter it did not return. The jaundice was practically gone by August 20; the red cell count fell to 3,180,000 and the Hb to 47 per cent. The urine findings returned to normal. In fact she appeared normal except for the weakness, loss of weight and anemic appearance. However, it was the tenth week before she was able to do her housework.

A guinea pig was inoculated with five cc. of blood from the patient on the fifth day of the disease and died on the tenth day following the inoculation. Leptospirae were found in the liver and blood. The guinea pig was jaundiced and there were many small hemorrhages beneath the skin.

Case 2. The husband of Case 1 was brought to the office from his place of employment August 26, 1937, where he had collapsed while at work. His illness began August 24 with aches all over body, fever and chills and some abdominal pain and vomiting. He had been very tired and weak but continued to work. No past illnesses except those of childhood. Temperature 102 3/5; pulse 139 and respiration 29. Examination showed a tall muscular man on the verge of collapse; eyes lustreless with conjunctivae red. Tonsils and throat were red; tongue dry and deeply coated with papillae showing through. Cervical glands swollen and tender; chest clear to P & A; heart moderately enlarged and sounds seemed distant. Liver edge and splenic region tender. Muscles of thighs and calves were very tender on pressure. Urine voided at office showed gross blood. Quantity one and one-half ounces, chemically albumin was found. Microscopically there was an excess number of RBC and ten granular casts per H.pf; WBC 19,200 Polymorphs 90 per cent; lymphocytes 9 per cent; eosinophiles 1 per cent; Hb 68 per cent; RBC 4,136,000. On the sixth day of the illness the patient was heavily jaundiced. The temperature varied between 101 and 102. The temperature hit normal on the second day of September and he was afebrile for three days. Fever then returned to 101. At night fever was present but fell to 99 in the mornings. No fever was present after September 13. The jaundice likewise had disappeared by September 13. By September 18 the red count had fallen to 2,800,000 with Hb 43 per cent. The urine became normal during the second week. The patient remained weak, fatigued and pale. He returned to work October 22, 1937, although still weak. At that time his count was RBC 4,560,000; Hb 83 per cent.

Darkfield examination of blood on August 30 showed a few leptospirae. Specimen of same blood sent to laboratory of the Ohio State Department of Health was reported to show "spirochetes similar to those found in Weil's disease". The same day five cc. of the patient's blood were injected into a guinea pig. The pig lost weight rapidly. It seemed to have a paralysis of its hind quarters the day before death on September 14. Pig was jaundiced and leptospirae found in liver and blood and peritoneal fluid which was greatly increased.

These two cases were reported to Dr. C. J.

Baldridge, Health Commissioner, who made an investigation. He found the walls and floors had many rat holes. It was found the whole block of buildings had been rat infested. Thus there was ample opportunity for the patients to have been in contact with rat urine.

The portal of entry for the organisms was probably through the tonsils or pharynx because the regional enlargement of the lymph glands would indicate that.

Case 3. White female, housewife, age 40 years was seen on October 26, 1929, at the home of her daughter. Patient was not fully rational, so history was obtained from her daughter. The illness began on October 24 with chills, fever, headache and diarrhea; her throat was sore. Her temperature was 102 when the daughter took it for the first time. The patient had refused to have a physician because she thought she had only the "intestinal flu". When she became irrational and her nose started to bleed the daughter called a physician. There was no history of past illnesses except a cholecystectomy two years previously. A single large stone was found at operation. There had been no trouble since then.

Temperature 104 1/5; pulse 132 and respiration 22. Her face was red and swollen; conjunctivae red; herpes about rim of mouth; some blood clots in nostrils; chest and heart apparently normal. Scar from cholecystectomy on abdomen; some tenderness but no rigidity in right upper quadrant; spleen not palpated but region tender; renal regions tender. The neck seemed slightly rigid. Patient groaned whenever moved or when any attempt was made to flex neck. The following day the clinical picture was the same except that there was some oozing of blood from the herpetic lesions. Urine showed albumin; 20 pus cells and 200 red cells to high power field. Stools were bile stained. On October 28 she had another chill; temperature 102. Liver edge was now palpable two finger breadths below costal margin and spleen was also palpable. Patient was jaundiced. Question of common duct stone or stenosis of common duct arose. Patient was advised to enter the hospital but she refused.

On October 29 jaundice was deeper. The stools were still bile stained; temperature 102 4/5. On the thirty-first the patient was improved; temperature 100 2/5. She entered Mercy Hospital November 1, 1939. Her admission temperature was 99 4/5, pulse 100 and respiration 24. On the following day her temperature was 101 2/5. Two days later it became normal and remained normal thereafter. Icteric index 38. Van den Bergh was positive and direct. X-ray examination revealed no abdominal pathology. No stone was visualized. No gall bladder shadow was seen. She began to menstruate on November 2 and was continuing to do so when she left the hospital on November 5. At home no fever was noted. The myalgias disappeared and she began to eat well and sleep well. She continued to menstruate immoderately. She became weaker, however, and lost weight, and looked very anemic. She returned to the hospital on November 16. No jaundice on readmission; R.B.C. was 1,200,000; hb 23 per cent. She was given two transfusions of 500 cc. of citrated blood and given liver, iron and vitamin B orally, and liver and vitamin B intramuscularly. By November 28 her R.B.C. was 3,080,000 and her Hb 44 per cent. She left the hospital on November 28. She was unable to do her housework until February, 1940. Since then her blood count has become normal and she has gained in weight and has had no further trouble.

Two guinea pigs were inoculated with five cc. of centrifuged urine each on the fifteenth day of the patient's illness. The first pig died on the thirteenth day following its inoculation. The other pig lost weight, was jaundiced but did not die until the twenty-sixth day following its inoculation. Intestinal hemorrhages were probably the cause of death. The liver and blood of the first pig showed leptospirae while none was found in the other pig.

This patient's home harbored rats. The rear of her home was on the bank of the river. It was on the opposite side of the street and one square away from the home of the two previous cases. In these cases the Widal test, the agglutination test for undulant fever were performed and were negative. In the third case blood cultures were made but were negative. In the three cases the Kline and Kahn tests were negative.

In these cases no special or immediate contact with rats was found. However, there was the constant possibility of contact with rats and rat excreta.

There was no fatality among these cases. The treatment was along the lines spoken of earlier in this paper. This was all that could be done, because there was no convalescent serum available. As far as is known, there is no commercial serum available. Since the blood and urine of these patients were pathogenic for guinea pigs and there was no mortality one would infer that one was dealing with mild cases of Weil's disease. The agglutination tests made months after recovery were positive.

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Intussusception Due to a Meckel's Diverticulum
A Report of Four Cases

JOHN R. SPRAGUE, M.D., and ROBERT S. SRIGLEY, M.D.

INTUSSUSCEPTION due to Meckel's diverticulum is quite infrequent. The earliest recorded case is the specimen placed in St. Bartholomew's Hospital Anatomical Museum in 1846. H. N. Harkins in 1933 reviewed 160 cases recorded in the literature.[1] Since then 16 have been reported. We wish to add four new cases.

Case 1: A boy, 4½ years of age, developed severe diarrhea lasting two days. His bowels then stopped moving, and he developed severe cramps and vomiting. He was admitted to the Sheltering Arms Hospital two days later on May 18, 1931. There was some rigidity of the right rectus muscle, and the abdomen was flat. No mass could be palpated. He was considerably dehydrated, and his general condition was poor.

Under ether anesthesia a right rectus incision was made. An intussusception was found which involved the distal 12 inches of the ileum extending to the ileocecal valve. The intussusception was easily reduced by expressing the distal end and by mild traction. When it was reduced, a Meckel's diverticulum was found. It was of the hour glass type and about one inch in diameter. The diverticulum and the appendix were removed. The abdomen was closed without drainage. He made an uneventful recovery and left the hospital on May 24, 1931. At the present writing, December, 1940, he is in good health and has no further trouble.

Case 2: A man, 20 years of age, was admitted to the Sheltering Arms Hospital on February 27, 1935, complaining of abdominal cramps and vomiting of a few hours duration. His bowels had moved four times during the day. There was no melena. On examination there was some rigidity of the right rectus muscle, and he was very tender at McBurney's point. His temperature was 97.5, pulse 90, and the white blood count was 10,050 with 85 per cent polymorphonuclears.

Under ether anesthesia a right rectus incision was made. An intussusception was found beginning with a Meckel's diverticulum and extending six to eight inches up into the ascending colon. The intussuception was reduced by stripping downward with the fingers. After reduction, a Meckel's diverticulum one inch in length and one inch in diameter was found. It was resected and he made an uneventful recovery. At the present writing he has had no further abdominal complaints.

Case 3: A boy, 10 years of age, was admitted to the Sheltering Arms Hospital on October 2, 1940, complaining of sudden severe abdominal pain followed by repeated attacks of vomiting. His bowels had moved once since the onset of the pain, and he did not notice whether they contained blood or not. He had had an attack of abdominal pain on one occasion a few weeks previously.

The Authors

- Dr. Sprague, Athens, Ohio, is a graduate of Ohio State University College of Medicine, 1908; surgeon at Sheltering Arms Hospital, Athens, Ohio.
- Dr. Srigley, Columbus, Ohio, is a graduate of Harvard University School of Medicine, 1939; assistant resident in surgery, Starling Loving University Hospital, Columbus, Ohio.

Examination revealed a fairly large mass at McBurney's point. The abdomen was otherwise flat and was not tender except over the mass. No peristalsis was heard on auscultation. A preoperative diagnosis of intussusception was made. Within an hour after admission, a right rectus incision was made under ether anesthesia. An intussusception including about 10 inches of the ileum was found, and it had not reached the ileocecal valve. It was easily reduced by expression, and at the apex of the intussusception, a Meckel's diverticulum was found. This was resected after clamping, and the walls were united with fine intestinal suture. After completing this, it was decided that the lumen was too narrow, and a side to side anastomosis was performed. The appendix was removed. A drain was placed in the bottom of the pelvis and brought out through the lower part of the incision. The wound was closed in layers with No. 2 chromic catgut.

He was given 1000 cc. of saline by hypodermoclysis twice daily. On the second day his abdomen became distended. He expelled considerable gas from his rectum. The drainage tube was removed on the fourth day. He continued to improve and left the hospital on October 14, 1940. He was seen again on October 26, at which time the wound was completely healed, and he felt quite well.

Case 4: A 20-year-old white male was admitted to University Hospital on February 6, 1941. He became sick at 3:00 A.M. on the day of admission beginning with generalized abdominal pain, cramping in nature, followed by nausea and vomiting. The pain gradually moved down to the right lower quadrant just medial to McBurney's point. Nausea persisted during the day. There was one bowel movement during the day but no melena and no hematemesis. He had a history of two preceding attacks similar to the present attack, one in August and the other in December.

Physical examination revealed a well developed and nourished white male complaining of acute abdominal pain. Temperature was 99.4, pulse 90, respirations 20, and blood pressure 140/80.

Submitted April 10, 1941.

From the department of research surgery, Ohio State University, and aided by the Comly Fund.

There was marked tenderness just medial to McBurney's point with increased resistance to palpation. Rectal examination revealed tenderness high on the right side, but no masses were felt.

Examination of the blood showed a white blood count of 15,650 with 80 per cent polymorphonuclears, 18 per cent lymphocytes, 2 per cent monocytes, and 24 per cent nonsegs. Urine was essentially negative.

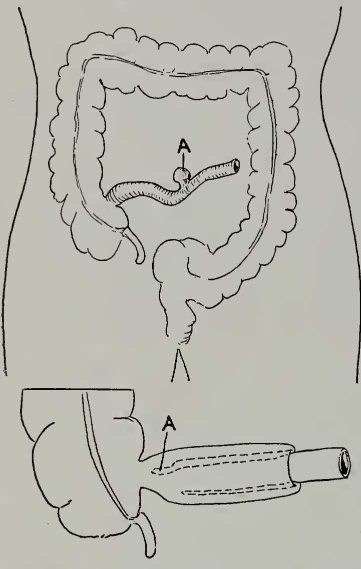

Figure 1.—Meckel's diverticulum (A) is usually thumb size and is often 14 to 16 inches from the cecum. It arises from the antimesenteric portion of the ileum. It occurs in about 2 per cent of normal persons.

Intussusception due to a Meckel's diverticulum usually follows inversion of the diverticulum which then usually forms the apex of the intussusception. It seldom progresses beyond the hepatic flexure.

A preoperative diagnosis of acute appendicitis was made, and the operation* was started at 6:00 P.M., 15 hours after the onset of the attack. A retrocecal appendix was removed, but it was not sufficiently injected to account for the symptoms, and it was also recalled that the pain had been much more medial than the lateral position of the retrocecal appendix could account for. Accordingly, the terminal ileum was explored. An intussusception was found involving about 8 to 10 inches of the ileum and located about 24 inches from the cecum. Repeated attempts at reduction of the intussusception were unsuccessful, and a small longitudinal incision was made through the constricting edge of the intussusception. Much transudate was released, and reduction of the intussusception was permitted. At the apex of the intussusception an inverted Meckel's diverticulum was found. The incision was sutured longitudinally. The diverticulum was removed by a longitudinal elliptical incision which was sutured transversely.

Plasma transfusion was started during the operation, and he left the operating room in good condition. Sulfanilamide was given by hypodermoclysis prophylactically during the first three days postoperatively, then sulfathiazol was given by mouth. The temperature was 103° on the first postoperative day and gradually returned to normal within three to four days. His further postoperative course was uneventful.

DISCUSSION

Four cases of intussusception due to a Meckel's diverticulum have been presented. All recovered from the operation which is remarkable when the operative mortality of other reported cases is considered. Harkins[1] reports a mortality of 56 per cent in children under five years of age and 36 per cent in patients over five years of age.

The classical symptoms of ordinary intussusception are: (1) sudden onset, (2) projectile vomiting, (3) shock, (4) abdominal mass, (5) bloody stools.[2] An abdominal mass was felt in one case, and there was no history of melena in any of the cases. Two of the cases had a history of preceding attacks. Also, in contrast to ordinary intussusception, the average age of these cases was 13.8 years.

The reduction of the intussusception in the first three cases was easily accomplished by stripping downward with the fingers. Gentle pressure should be applied over the intussuscepiens with the hand, and the invaginated part is squeezed out.[3] The reduction should be accomplished intraabdominally, if possible, until the region of the cecum is reached when reduction becomes more difficult. At this stage the mass may be delivered outside of the abdomen. The serosa of the intestine may be split, but this is not a serious complication. This should be repaired with a few stitches of silk or fine catgut.

Irreducible intussusception is usually treated by resection of the intussusception and double enterostomy, although a primary lateral anastomosis may be performed in some cases.[4] In the last case, a longitudinal incision through the constricting edge of the intussusception permitted reduction of the intussusception.

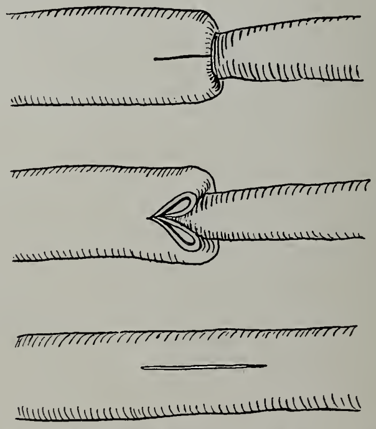

Figure 2.—The intussusception of the fourth case was irreducible. A longitudinal incision was made through the constricting ring of the intussusception allowing reduction of the intussusception.

Note: This operation was performed by Dr. Charles Baber, resident in surgery at University Hospital.

The Meckel's diverticulum should not be removed if the condition of the patient is poor, provided that the diverticulum itself is in good condition.[3] Bickham[5] describes a technique in which the diverticulum is excised by a transverse elliptical incision. Enough of the base should be removed to make certain of removing any gastric mucosa in case it is there, but the incision should not be deep enough to result in encroachment upon the lumen of the intestine. Repair of the incision should be by transverse suture. Purse string suture is to be condemned.

The appendix, although appearing edematous, should not be removed unless it is gangrenous or unless the vessels are thrombosed because of the additional operative trauma.[3]

The most important factor in lowering the operative mortality of intussusception is to combat dehydration and shock with adequate parenteral fluids and transfusion with plasma or whole blood is necessary.

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Diagnosis of Coronary Occlusion

Heart disease of middle life and old age is the chief cause of death. Periodic examinations aid in the detection of obesity, hypertension, diabetes and early coronary sclerosis. Prophylaxis of occlusion depends on the diagnosis and management of incipient coronary disease.

Although typically severe, the pain of occlusion may be mild or absent. The sudden onset of a weak pulse, feeble heart tones, gallop rhythm, tachycardia, fibrillation, extrasystoles, dropped beats or heart block, dyspnea, recurrent colds, cough or asthma may be significant.

Electrocardiography is an invaluable check on clinical findings, during the latent period and in the diagnosis of occlusion. With proper application of the method the diagnosis can be established with a high degree of accuracy in the majority of instances. The most valuable recent advance has been the widespread appreciation of the value of serial curves in diagnosis, in following the course and in determining the prognosis of myocardial infarction.—J. Bailey Carter, M.D., Chicago; Jour. Michigan S.M.S., July, 1941.

It is not fair to measure the effectiveness of public health work entirely in terms of mortality, because much of its effectivenss actually has nothing to do with mortality but with morbidity. —Raymond Pearl, Survey, April, 1940.

Amebic Dysentery

In 1933 a certain New York City night-club hostess, famous for her candid greeting of welcome to her guests, became ill on the West Coast with what was diagnosed by her physicians as acute appendicitis. Despite a phone call from the Chicago City Health Department, a laparotomy was performed, and the night-club hostess' career came to an abrupt and untimely end. The interest in the case displayed by the Chicago City Health Department was due to the fact that it had uncovered the existence of an extensive epidemic of amebic dysentery occurring among guests of two adjacent Chicago hotels. Autopsy revealed that, as the Chicago City Health Department had suspected, the hostess' illness had been amebic dysentery.

Hers was only one of over 1,400 cases discovered by that Department as a result of a follow-up of each guest registered at the two hotels. The cases were scattered among residents of 43 states, three Canadian Provinces, and the Territory of Hawaii. The unfortunate outcome in the night-club hostess' case was a fate shared by 40 per cent of the victims who were subjected to operation because the illness was mistaken for appendicitis. The case fatality rate among all cases was only 7 per cent.

Investigation disclosed that the illnesses were due to infected drinking water. Through faulty plumbing, fresh sewage from one hotel was introduced directly into the drinking water supply of both hotels. Interestingly enough, no case of typhoid fever or of any of the other usual enteric diseases was discovered. The reason for this apparent paradox is that the Chicago water, which is derived directly from Lake Michigan without preliminary filtration, is usually quite heavily chlorinated, and the chlorine residual was apparently sufficient to destroy the usual enteric pathogens but was not effective against the amebic dysentery cysts. That both typhoid fever and amebic dysentery would occur if the water were freshly polluted with sewage in the absence of chlorination was amply demonstrated in the same city shortly afterward (May, 1934) when both typhoid fever and amebic dysentery occurred among firemen and spectators drinking from a local, heavily contaminated source of water used in fighting an extensive fire in the Chicago stockyards.

The importance of the hotel outbreak from an epidemiologic standpoint is that it clearly demonstrates amebic dysentery may be an important disease in the temperate zone as well as in the tropical zone and that it may be transmitted through contaminated water as well as by food infected by carriers. The food-handling carrier was formerly assumed to be the only factor of importance in the transmission of the disease.—James E. Perkins, M.D., Dr. P.H. Albany, New York; N.Y.S. Jour. of Med., Vol. 41, No. 14, July 15, 1941.

A Technique for Studying Experimentally Induced Convulsive Seizures

O. P. KIMBALL, M.D.

IN 1935 Chaffee and Light[1] described a method of producing convulsive seizures in the monkey by an electrical stimulation of the cortex. Although their technique did not permit of accurate measurement of the stimulus and therefore could not be used for comparative study, it showed that a convulsive seizure, typical of the so-called Jacksonian epilepsy, could be produced by an electrical stimulation directly on the cortex. In 1937 Putnam and Merritt[2] described a method of producing convulsive seizures in cats. In this technique, the stimulus (A.C. current) was applied through a copper plate over the top of the head in contact with the skin, while the other electrode was in the mouth. This method was tried in our laboratory but a definite seizure could not be produced. A severe shock is produced, even electrocution and death, but not a clear-cut convulsive seizure.

In our method the stimulating electrode is placed on the dura over the motor area. For this electrode we use No. 24, triple insulated copper wire further insulated by rubber tubing just large enough to take the No. 24 wire, and thoroughly glued to the wire. The skull is bared and pierced with a dental drill over the motor area. A freshly cut end of the wire is inserted through this opening, and is placed in contact with the dura pressing against the cortex. Originally it was inserted through the dura directly on the cortex, but there is no difference in the effect of the same stimulus, and there is danger from infection. The electrode is securely fastened in place by wiring it to the skull. The other end of the wire protrudes through a small opening in the skin an inch from the scalp incision down the back of the neck. The indifferent electrode is placed over the thoracic spine.

Our stimulator is a simple machine devised to use the a.c., 60-cycle, 110-volt current used for lighting. The volt meter measures from 1 to 50 volts. The ammeter is a very sensitive and accurate meter, wired to measure 1/100 to 100 milliamperes. Within the box is a resistor, or simple Ohm-meter, which measures from 0 to 10,000 Ohms, which keeps the current off the cat during adjustments. For each experiment the resistance is determined with a very low current, 1-2 m.a. Then, during the adjusting for the amount of the shock, the current is on the resistor. The current is snapped from the resistor to the cat. By this method the time and current can be measured accurately.

The Author

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Soon after a cat has completely recovered from the operation, we determine carefully the least stimulus that will produce a typical hard seizure. This we designate the basal seizure threshold. For example, if a current of 4.3 m.a. for three seconds produces a typical hard seizure, 4.3 m.a. is the basal threshold. The time factor is always three seconds. As long as the animal is in a healthy condition and the wire is in good contact, the basal threshold remains constant. Before each experiment we recheck the basal threshold and if it is exactly what it was previously, or within range of error, we proceed with the experiment. Recently one cat was used in ten different experiments over a period of one month. The basal threshold varied between 4.3 m.a. and 5.1 m.a. In most of our animals the threshold remains constant for three to four weeks, for this is as long as the wire will remain firmly in place. These findings correspond very closely with those recently reported by Clark and Ward[3].

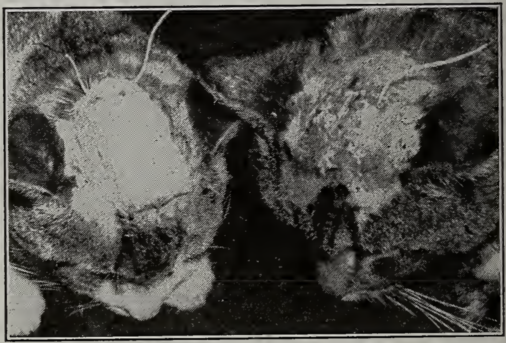

Fig. 1-A. Recently operated. Fig. 1-B. After one month of experimental study.

A drug is given intravenously to measure its anticonvulsive effect and the threshold is checked after 30 minutes. The maximum effect of our

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Read March 26, 1941, before the Neurological Section of the Cleveland Academy of Medicine.

From the Surgical Laboratory, School of Medicine, Western Reserve University.

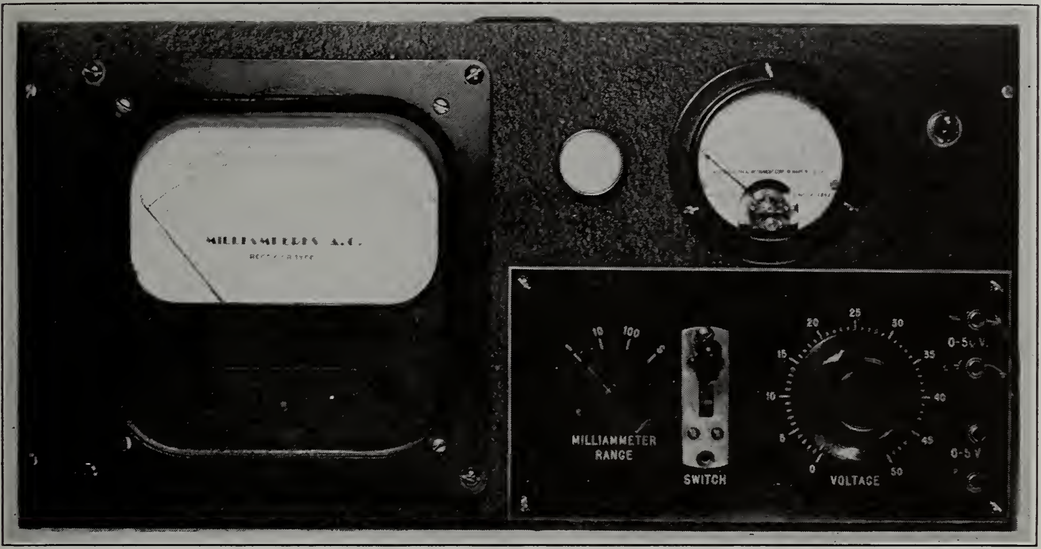

Fig. 2. Machine used for electrical stimulation.

common anticonvulsant drugs occurs in approximately one hour. For a comparative study of some of our well known drugs we used the average clinical dosage (see Chart 1). If the basal threshold is 5 m.a. and after the drug the threshold is 12 m.a., the increase is 7 m.a. or 140 per cent. If a drug repeatedly and consistently increases the threshold by 140 per cent, we take this increase as an index to its effectiveness.

CHART 1

Percentage Increase in Basal Threshold

Drug	Dosage	No. of Cats	Average
Dilantin	6mg/kg	11	113.6%
Cyclopal	6mg/kg	6	96.8%
Luminal Sodium	6mg/kg	5	92.4%
Benzyl-Hydantoin	6mg/kg	7	60.5%

To prove the value of this method of study, it was necessary to demonstrate the same relative effectiveness of these drugs in clinical convulsions, or epilepsy. The comparison between luminal and dilantin has been tested many times. We have observed repeatedly that dilantin is 25 to 30 per cent more effective and much more consistent than luminal. Frequently the toxic depressing effects of luminal are much more in evidence than its anticonvulsant power.

Cyclopal, while effective in single doses experimentally, cannot be used clinically because of its hypnotic effects.

The benzyl hydantoin was approximately one-half as effective as dilantin both experimentally and clinically. Cases which required 0.3 gram dilantin daily to control the seizures, required 0.5 and 0.6 gram benzyl hydantoin to produce like effects.

We have learned to think of an anticonvulsant effect as a specific action and not as a side reaction of hypnosis or depression. In the past, the standard pharmacological test for an anticonvulsant action was to give the drug in increasingly large doses and watch for hypnosis and depression. If no hypnosis, the conclusion was that there could be no anticonvulsant property.

To clarify this theory the following points are given:

1. Dilantin has no hypnotic effect either experimentally or clinically.
2. The benzyl groupings are stimulants or even irritants to brain and spinal cord, yet there is some specific anticonvulsant effect. With benzyl-hydantoin, mentioned above, the anticonvulsant power is approximately half that of dilantin and there is no sedation or hypnosis.
3. Di-benzyl-barbituric acid has no hypnotic or depressing action; instead it is a stimulant to brain and spinal nerves. With small doses (6mg/kg) the cat shows increased alertness and is definitely hypersensitive. With large doses (30 mg/kg) this drug is a marked irritant to cortico-spinal nerves, typical of strychnine poisoning. After this irritating effect has left, there is a definite anticonvulsant effect which lasts 24-48 hours. This drug could not be used clinically, however, because of toxicity.
4. And to carry this study one step further we tried the classical brain stimulant, the inhibitor of sleep, benzedrine sulphate. This drug in small doses (1mg/kg) increases the basal seizure threshold from 25 to 50 per cent. Average for five cats equals 33 per cent. This drug is now being used clinically with good effect in selected cases of epilepsy. Sometimes it is combined with luminal.

We have demonstrated: *That* you can accurately measure the basal seizure threshold by a localized electrical stimulus; *that* this threshold remains constant for weeks if the animal remains in good health and the electrodes are in contact; *that* you can measure the specific anticonvulsant effect of any drug; *that* this effect obtained experimentally compares closely with the effect of the same drug in clinical use; *that* the anticonvulsant effect is not necessarily associated with a hypnotic or depressant action.

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Migraine

I feel strongly that the present way of handling migraine is not a credit to the medical profession. The patient is examined from head to foot and nothing is found. Then the patient goes to another man and gets another $125.00 examination, and then perhaps another without getting relief.

When a patient with migraine comes in I say, "I have little interest in examining you from the neck down because even if I were to find a so-called colitis or even a cancer of the colon, it would have nothing to do with the migraine." Migraine is a hereditary condition, a disease probably of the sympathetic ganglions in the neck which influence the size of the external carotid artery. When it opens, then up the blood goes surging and pounding into the brain, and when there is abnormal pressure in the cerebral vessels there is pain.

Why then examine these patients from the neck down? Well, if one does not do that, what shall he do? I would say, spend the time in trying to find out what is the matter with the patient's psychologic processes. Whenever a woman tells me that she is having at least three attacks of migraine a weeek, I say to her, "You must be using your brain uneconomically and wastefully; you are probably unhappy, perhaps, you have some problem you cannot solve, perhaps a sexual one, or are you afraid about something, or you are getting tense." These persons all have a peculiar migrainous temperament; they are tense, mentally active persons who fret over work before it is started, and who want everything done just so.

Now, when it comes to the handling of an attack, the essential thing is to treat it strenuously the minute it appears. One trouble with patients with migraine is that they often are subject to two headaches, one fairly mild, nervous one and the other a migraine; and when the pain comes they are inclined to hope that they are going to have only the mild type of trouble. By the time they discover that it is going to be a migraine headache it may be hard to stop the pain and nausea.

There are only two drugs that I know of that will stop a high percentage of severe attacks of migraine. One is gynergen, which is best given hypodermically. Often it does not work by mouth. It it works well the patient should be taught to take care of a hypodermic syringe and use it. Attacks often come in the middle of the night, and if the patient has to wait until 10:00 or 11:00 the next morning to get a physician, this may be too late for efficient treatment.

The other drug that I have found useful in perhaps four out of five cases of true migraine is pure oxygen. This should be breathed preferably through a B-L-B aviator's mask. One can test it out by getting the anesthetist in the hospital to give it, or it can be given through a basal metabolism machine. If it works well the patient should have a tank, reducing valve and mask at home. Try it for at least two hours at a time. Do not be afraid of it.—Walter C. Alvarez, M.D., Rochester, Minnesota; Jour. Mo. S.M.A., Vol. 38, No. 8, August, 1941.

Cobra Venom Analgesia in Surgery

Cobra neurotoxin when given to 38 surgical patients in doses recommended by the author, assisted materially in the relief of postoperative pain and discomfort. The full effect of the venom was manifested 48 to 72 hours after its use in cases prepared two or three days before surgery. Increased dosage on the day of operation proved effective inasmuch as fewer narcotic injections were required. The venom is synergic with the opiates and enhances their analgesic properties without making the patient utterly stupid or comatose. As a whole, those patients who received injections of venom were brighter, slept better, suffered less from gas pains and retained better appetites than those who had been narcotized for two or three days following surgery.

Cobra neurotoxin has an accumulative action which lasts several days after injections are discontinued, thereby extending the period of postoperative analgesia. Its recipient does not complain of blurred vision.—Paul E. Craig, M.D., Coffeyville; Kansas; Jour. Kansas M.S., Vol. XLII, No. 7, July, 1941.

Only the most rigid contagious disease technic provides a barrier and prevents the spread of tubercle bacilli from hospital patient to student nurse.—J. A. Myers, M.D., et al, Annals Intern. Med., Nov., 1940.

The Use of Beta Erythroidine Hydrochloride* In Metrazol Therapy

A Preliminary Report

JONATHAN M. WILLIAMS, M.D.

IT was in 1935 that Von Meduna[1] announced he had succeeded in altering the course of schizophrenic regression by convulsions induced with metrazol. Friedman[2] was the first in this country to report on its use with favorable results. These early reports of results were most encouraging.

The first suggestions that metrazol therapy was not without hazard came from Stalker,[3] Wespi,[4] and Satta,[5] who reported vertebral fractures occurring during the course of the convulsions. Other bony complications were noted by observers, but these, for the most part, were regarded as isolated occurrences. Although Von Meduna and Friedman[6] reported in February, 1939, that "mechanical" complications, excluding temporo-mandibular dislocations, were only 1.1 per cent in over 3,000 cases, there was a growing belief among those engaged in giving metrazol that compression fractures of the spine were of more frequent occurrence than the literature on the subject would indicate. Efforts were made to decrease the incidence of vertebral complications by altering the posture of the patient about to receive treatment. Hamsa and Bennett[7] used spinal anesthesia preceding the treatment, but their recommendation was not generally adapted. Subconvulsive doses of metrazol were given but proved ineffective in changing the course of the psychosis.

In the summer of 1939 during the preparation of a paper[8] on vertebral fractures following metrazol, the suggestion was made that curare might be of value in mitigating the violence of the metrazol convulsions. However, correspondence with a large pharmaceutical house indicated that this substance was difficult to obtain and the supply and potency were unreliable. As an alternative, erythroidine was suggested.

THE NATURE OF ERYTHROIDINE

Beta-erythroidine is an alkaloid occurring in the bean-like seeds of a few species of a genus of tropical and subtropical plants. Some species of erythrina are variously known locally as "coral boom", "coral tree", and the native name "mulungu", but these are not necessarily indentical with those species yielding beta-erythroidine. Extracts of seeds of a Mexican species were first described by Altamirano in 1876 and later[9] were the subject of an extensive pharmacological report. During the years 1880-1881 there were several short reports[10,11] in the literature describing the curare-like action of extracts of other species in animals. More recently,[12,13,14] crude extracts of still other species have been subjected to pharmacologic study and it was confirmed that the crude extracts of several species show curare-like properties—that is, they block the myoneural junction, interrupting efferent impulses.

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Following the isolation of erythroidine by Folkers and Major,[15] there were reported data relating to the dose per kilo of body weight which could be taken as constant values. By comparison this is to be reckoned as an advantage over curare for that substance is notoriously variable in its potency from batch to batch. It was further determined that, although erythroidine, weight for weight, was less potent than curare, its effects were quickly dissipated by the organism.[16] Investigation also revealed that two dextro-rotatory forms of erythroidine exist[17] and the second, or beta form is the more active of the two. Beta-erythroidine hydrochloride occurs as small needle-like crystals white in mass and freely soluble in water. It melts with decomposition at 234-235°C. and has been assigned the empirical formula of $C_{16}H_{19}NO_3HCl$. Unlike curare it is effective when given by mouth. It was with this beta-erythroidine hydrochloride that these studies were made.

The rationale of the treatment is this: If

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*The Beta Erythroidine Hydrochloride used in this study was furnished by Merck and Company, Incorporated, Rahway, New Jersey. We are also indebted for the cooperation accorded us by their Department of Medical Research in making available to us pharmacodynamic studies on erythroidine as done at Merck Institute.

metrazol is therapeutically effective as a result of the cerebral commotion it creates, then efforts to diminish the attendant convulsions must be applied peripherally, not centrally. Barbiturates are central depressants and in fact, are recommended to halt a metrazol convulsion. Curare or curare-like drugs as peripheral inhibitors of motor activity should permit the central commotion to continue unimpeded for a therapeutic result but obliterate the convulsion with its unfortunate side effects. In this investigation the validity of this premise was tested and found to hold.

METHOD OF ADMINISTRATION

At first efforts to prepare the solution of erythroidine were directed toward introducing the drug in as small a volume as possible. This was done solely for the convenience of administration. Initial treatments were done with a drug concentration of 100 mg. per cc. When we observed that our results were not at all uniform, the mistake was made of believing that this was because the drug was not in sufficient concentration to produce the desired paralysing effect. Solutions were then prepared containing 200 mg. per cc. Results following this were most discouraging. On one occasion we would give, for instance, 1000 mg. of the drug and find that we had a perfect paralysis: respiration mostly abdominal, expressionless facies, and pulse of good volume; then following metrazol, a feeble one or two plus convulsion. The next treatment would be done in exactly the same way, but the paralysis would be disappointing, and the patient would experience a severe reaction. This phase of our investigation was abruptly changed after our experiences described in detail a little farther on.

It became apparent that the reason we had such inconsistent, and sometimes alarming results was that the dose of erythroidine was in such small volume that we were not obtaining thorough dispersal. A complete dose of 1000 mg. would be contained in 5 cc. and when given in 30 to 40 seconds could not possibly be depended upon to affect equally muscles at the extremes of the body.

Accordingly, the concentration was radically changed to 33.3 mg. to the cc. Solutions were made up in three or six hundred cc. lots (10 or 20 grams, respectively, of the dry drug being dissolved in sterile distilled water). We have observed no deterioration in the drug over two weeks—the longest one batch has lasted. The solution usually is of a pale amber color. This is given at the rate of about 100 mgm. every ten seconds from a 50 cc. syringe through a 20 or 22 gauge needle. When this dilution was used we were gratified to observe that a more uniform paralysis resulted and could be depended upon from treatment to treatment. Since the adoption of this last method of administration we have not observed a single fracture as a complication of metrazol when given with erythroidine.

Animal experimentation was of little help in computing a dose therapeutically effective; however, 400 mg. was found to be a safe dose with which to begin.* This was given intravenously at a rate of 100 mg. every ten seconds. Our experience shows that if drooping of the eyelids and inconstancy of gaze did not occur before half the volume were given, it indicated that the dose was insufficient and we would be risking a fracture by giving metrazol.

As the drug is being injected slowly the first sign is a subjective one: dizziness. Almost immediately there follows an oculomotor paralysis with drooping of the eyelids and lack of coordinate eye movements. These result in flickering, nystagmoid movements and the subjective complaint of diplopia with inability to cross the eyes. The face becomes calm and expressionless with all creases ironed out. The tongue is unwieldy and phonation is difficult. The soft palate drops and the patient frequently snores as he breathes. He lifts his head from the pillow with great difficulty and sits erect only by grasping the knees or the side of the bed. The reflexes are little changed by the drug though tending to be less active. Curiously, there appears patellar clonus, first unsustained and later sustained. The pulse usually rises six to eight points, then almost immediately drops ten to twenty points below the initial reading. The blood pressure, too, undergoes similar variations, a transient, slight rise in the systolic level followed by a drop of ten to twenty points. Respiration may either become more rapid and shallow, or the rate may lessen and the exchange remain the same. Slight pallor and sometimes cyanosis is observed.

All these changes occur within 30 seconds after the appearance of the ptosis. During this time the sensorium remains clear, but the patient is incapable of expressing himself.

It is well to have a nurse constantly observe the radial pulse. If, during the administration of erythroidine, its character makes any decided change, the injection is halted for 15 or 20 seconds. Should the pulse still remain poor, no more of the drug is given. It is usual to observe that the character of the pulse will have changed from "good" to "fair" by the time the total dose of erythroidine is given.

Immediately upon the withdrawal of the erythroidine needle the metrazol is injected. It was found that if the metrazol were delayed a minute or so, the peak of the erythroidine effect had been passed, and there was likely to occur a severe convulsion in spite of adequate erythroidinization.

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*We are indebted to Dr. D. E. Cameron and Dr. S. R. Rosen of Albany Hospital (New York) for their kindness in making available unpublished data relating to animal experimentation with erythroidine and also their early experiences in treating patients.

After the metrazol is given, the intensity of the resultant convulsion which occurs within 10 to 50 seconds later is estimated by the rigidity of the abdominal muscles in the tonic phase of the seizure. These estimations we roughly designated as zero, one, two, three, or four plus. It is our opinion that a three plus convulsion or less will not cause vertebral compression fractures. The convulsion is of the usual duration.

We have not observed the development of tolerance for erythroidine. Once an adequate dose has been determined, the patient continues to have the same degree of paralysis from treatment to treatment. However, it would seem that the tolerance to metrazol which has been observed in treatments previous to erythroidine does not occur so readily when erythroidine is given. We have carried patients through a course of 15 or 16 treatments and never exceeded 4.5 cc. of metrazol as a convulsing dose.

Following the convulsions all signs of erythroidinization usually have faded, for metrazol exerts an antagonistic effect on erythroidine. Occasionally, however, there remains a moderate bulbar paralysis which impedes respiration but may be quickly relieved by 1 cc. of prostigmine (1:2000 dilution) intravenously. This is a synthetic preparation similar in action to physostigmine and an antagonist of erythroidine. This is not always necessary as erythroidine is quickly excreted and the patient may be helped by an airway such as anesthetists use or the mouth may be held open and the tongue prevented from falling back in the pharynx until the embarrassment has passed.

The total disability due to erythroidine has never been observed by us to exceed 15 or 20 minutes, though dizziness is sometimes complained of for an hour afterwards.

ANALYSIS OF MATERIAL

The nature of the studies here reported make simple tabulation of the results impossible. This is due to the fact that in a sense, this work is a pharmacodynamic study in man of erythroidine as well as a therapeutic trial. The literature records only one instance[18]* where erythroidine was given to man, though poisonings by the erythrina bean must have occurred.

Twenty-one patients, the majority with affective psychoses, received erythroidine in conjunction with metrazol therapy. As usual, each patient had a complete physical examination—blood sugar, blood urea nitrogen, urine analysis, and control X-ray films of the spine.

For the purposes of analysis these 21 cases are divided into two groups: one comprised of those patients who received the erythroidine with metrazol for a complete therapeutic course; and the other in whom it was thought advisable to terminate treatment before a desirable effect could be obtained.

A total of 168 intravenous injections of erythroidine were given to these patients. Group one received 156 injections distributed throughout 15 patients for an average of 10.4 treatments apiece, though the extremes varied from 2 to 18 treatments. Six patients in group two received 12 injections, an average of two apiece.

Thus it may be seen that erythroidine is likely to produce its ill effects, if any, at the beginning of treatment. So it may be predicted that if a patient shows no harmful consequence to his first two or three injections it is probable that he will withstand the course of treatments without further complications attributable to erythroidine.

In this investigation social remission, while urgently desired, was not held to be of paramount consideration, as the therapeutic value of metrazol has already been attested. What we sought were less vertebral fractures.

In the 15 cases mentioned above in group one, four sustained compression fractures. These, however, were considerably less severe than in the majority of cases reported from this institution by Krause and Langsam[8] in a series immediately preceding this. There were no wedge deformities of the vertebral bodies, and according to the criteria of Krause and Langsam, they would be described as "minimal deformities". The cases sustaining fractures are four of the original six cases upon whom erythroidine was first tried. It is our belief that lack of acquaintance with the drug and its activity prompted us to give metrazol in convulsive doses before an adequate erythroidine effect was obtained. When we learned to recognize the difference between enough erythroidine and not enough erythroidine, we withheld metrazol in the latter instances and had no further trouble. This is well illustrated in the following case:

> After her second metrazol and erythroidine treatment, which was a four plus convulsion, G. K., a 27-year-old white female, complained of back pain. X-rays were reported as showing "Slight fracture of the sixth and seventh dorsal vertebrae". Treatment was continued, the patient receiving in all, 12 treatments. An X-ray taken before discharge is reported as follows: "Lateral views of the lumbodorsal spine show no further fractures to have occurred. The previously described fractures are not worse."

Of the 15 patients, six have been discharged. Four more at the time of writing are in a good remission and will probably be discharged within the next week or two. Of the remaining five, two showed temporary improvement in behavior while receiving the treatments, but quickly relapsed when it was discontinued. Three showed no change whatsoever in their behavior or outlook and treatment was discontinued because it was considered futile.

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*Since this writing, others have reported on erythroidine, notably: Rosen, Cameron and Ziegler, (Psychiatric Quart. 14:477; July, 1940), Eisenstein and Tarlau (Arch. Neurol. and Psych. 45:649; April, 1941).

This would indicate that erythroidine does not inhibit the therapeutic action of metrazol, for we have here a recovery percentage equal to that of metrazol alone. As a matter of fact, it would seem that in some cases erythroidine not only may enhance the action of metrazol, but actually displace it as a therapeutic agent. We have consistently observed a marked improvement in the patients' behavior when they are receiving erythroidine alone. One of our cases subsided from an acute schizo-mania on only erythroidine. The mechanism is not altogether clear but would perhaps be akin to that sometimes ascribed to metrazol wherein the fear produced by the drug permits the discharge of an unnaturally high emotional potential.

Group two is made up of six cases. These will be reported in detail as they reflect the toxic effects of erythroidine. One patient was included in this group merely because she was released on court order from the hospital after the first treatment. No conclusion was reached as to the effect of the treatment on her.

Perhaps the most obvious complication of erythroidine would be over-dosage with consequent respiratory paralysis. We have observed this five times, not only in this group but in patients of the first group as well. Respiration frequently is seen to be entirely diaphragmatic. The thorax is immobile except at the costal margin which buckles slightly inward as the diaphragm contracts. Retraction of the costal interspaces may be observed when obesity does not obscure it. Usually metrazol given in this state produces a very feeble convulsion. When, however, diaphragmatic respiration is paralyzed the situation is somewhat more grave.

CASE REPORTS

Case No. 1.—A. L., a 26-year-old female. Diagnosis schizophrenia, catatonic type. For her sixth treatment the patient received 700 mg. of erythroidine intravenously. This was given over a period of 65 seconds in a concentration of 100 mg. to the cc. As the injection was completed, there was some twitching about the eyes and lips with fibrillary jerking in the platysmae. Respiration completely ceased and cyanosis became extreme. The pulse was of good volume and had dropped 16 points from its initial reading. The patient was placed in the prone position and artificial respiration begun. One cc. of adrenalin was given intramuscularly. After three minutes of artificial respiration, short regular gasps were observed. The patient was then returned to the supine position and four cc. of metrazol were given which resulted in a feeble (one plus) convulsion. Following this the pulse was 102, respirations 18, and blood pressure 106/68. The patient stated later that she was "awake" but simply could not breathe. It was as if she were smothered, she said. (This treatment produced a marked alteration in the psychosis. The patient was discharged one week later, apparently normal.)

When respiration alone seems to be impaired we have found prostigmine to be of value in relieving the embarrassment, but if there seems to be any alteration in the character of the pulse, and this is quite frequent, it is best to accompany the prostigmine with intramuscular adrenalin.

A totally unexpected complication of erythroidine was its effect on the heart. This is illustrated by our experiences with three cases.

Case No. 1.—E. C., a 60-year-old white female, was started on therapy with the diagnosis of agitated depression. On admission her heart was not enlarged, there were no murmurs, blood pressure was 160/90, and she had minimal arteriosclerosis. For her second treatment, the patient received 800 mg. of erythroidine intravenously, whereupon her voice became hoarse and ptosis was noted. Four cc. of metrazol were given and the patient had a two plus convulsion. Following the seizure, respiration was established for three to four gasps, but the pulse was barely perceptible. Artificial respiration was immediately started and adrenalin and coramine given intravenously. Four or five minutes later a faint pulse was heard and felt for 15 or 20 seconds and then ceased. Intracardiac adrenalin was given two times but failed to revive the patient. Unfortunately, permission for necropsy was refused.

Hayman and Brody[19] report the death of a patient following metrazol which in many respects is similar to ours. They gave as a cause of death acute cardiac dilatation. For a while we were content to believe that this death was due to metrazol, not erythroidine. However, another experience suggests that the blame may, at least, be equally divided between the two drugs.

Case No. 2.—T. C., a 42-year-old Italian female, was admitted with the diagnosis of "agitated depression". She was hyperkinetic to an extreme, yelling herself hoarse and gesticulating wildly. Eight hundred mg. of erythroidine were given slowly, dissolved in 4 cc. The patient became less resistive and respiration became more shallow. A peculiar macular erythema suffused her neck and chest and cyanosis appeared. Respiration was mostly abdominal. Four cc. of metrazol were given but there was no convulsion. In 20 minutes the erythroidine effect had completely disappeared. On her next treatment, 1000 mg. of erythroidine were given. Because of the extreme agitation of the patient this was given much more rapidly than the first time. Ten seconds later the patient was in coma. There were a few twitches about the mouth and brows. The color was ashen. Within 30 seconds one cc. of prostigmine was given without response. The pulse was absent and heart sounds not heard. The blood pressure was not obtainable. Artificial respiration was started and 1.5 cc. of adrenalin given intracardially. Some 30 seconds later and around three minutes after the pulse had disappeared, faint, irregular heart sounds were heard. At first there were intervals of three to ten seconds between these and they came in twos and threes. Adrenalin was given intramuscularly (1 cc.) and coramine intravenously (1 cc.) Artificial respiration was continued. Gradually, the heart action became audibly stronger. Throughout the pupils remained dilated and fixed. There was urinary incontinence. A few spasmodic gulps for air occurred seven minutes after respiration had ceased. These, too, became deeper, stronger, and more regular. Ten minutes later the patient started to hyperventilate and within 20 minutes had recovered consciousness and was yelling as usual. Since her blood pressure taken during her semi-coma was 92/50 (initially it was 140/60) three-fourths gr. of ephedrine was given intramuscularly. Nine hours later it was 104/78.

What we believed to have happened was this: the erythroidine was given too rapidly and in too concentrated a solution. Therefore, it arrived in the right atrium and right ventricle and effectively dampened conduction in the heart by blocking the impulses coming through the Bundle of His and the Purkinje's fibers. As a consequence, the heart stopped beating. Presumably, impulses were still coming down from above or arising in the S. A. node and A-V node but were prevented from imparting their stimuli to the muscle fibers by the erythroidine. However, **chemical** stimulation, i.e., adrenalin, and perhaps **mechanical**—the passing of the needle through the muscle wall—was capable of initiating the cardiac cycle. Circulation having been resumed, the prostigmine lying in the cubital vein was carried to the heart and there assisted the adrenalin in overcoming the effects of the erythroidine.

A similar experience would seem to indicate that erythroidine may partially interrupt conductivity, giving the clinical picture of heart block.

Case No. 3.—T. G., a 43-year-old white male, was admitted with the diagnosis of "involutional psychosis, melancholia". He was given an initial dose of 600 mg. of erythroidine dissolved in 18 cc. There was no effect until the dose had been completely administered when there developed a strabismus with some ptosis. The next time 800 mg. were given in 24 cc. over a period of 105 seconds. At 70 seconds drooping of the eyelids was observed. The pulse, which was 84 and of only fair volume when the treatment was started, became poor. The blood pressure dropped from 110/70 to 90/60. Three cc. of metrazol were given without a convulsion. It was then noted that the patient seemed to be suffering from a mild vascular collapse. Respiration continued unimpeded. The pulse rate dropped to 48, then 42. One and one-half cc. of adrenalin were given intramuscularly as the pulse became 38. The patient remained conscious throughout and insisted he "felt fine". Caffeine sodium benzoate (2 cc.) was given intramuscularly, and the pulse rose to 48. At this time the blood pressure was 210/110. The radial and apical pulse now revealed a typical auricular fibrillation. This continued for two minutes and gradually was supplanted by a cardiac rhythm of many extra systoles and drop beats in the radial pulse. This lasted 10 minutes and gave way to a definite pulsus begeminus which persisted for 15 minutes and blended into an ultimately normal rhythm. Blood pressure at this time was 120/76. Unfortunately, electrocardiographic tracings could not be made at the time, but a record made a few hours later revealed only "auricular premature contractions".

This last case leads us to believe that some individuals may be unduly sensitive to erythroidine. We feel that this was similar to case No. 2 except that there was a less extensive involvement of the conduction system of the heart. The belief that the action was exerted peripherally and not centrally is supported by the fact that the patient remained conscious throughout, and there was no evidence that other functions of medullary origin were hampered. Respiration was unimpeded, and there was no bulbar paralysis.

Two other cases showed signs of cardiac involvement. In these, on two separate occasions during the administration of the more dilute erythroidine the patient showed a marked pallor and the pulse became weak and thready. Except for a little drooping of the eyelids there was no other erythroidine effect. The injection was immediately stopped and the condition of the patient did not change until adrenalin was administered. Since this happened twice to each of two patients further treatments were withheld, for we believed that these signs presaged more serious cardiac involvement.

Doctor A. A. Hill of the Department of Medicine kindly made electrocardiographic studies of several patients during erythroidine administrations. He reported that there was evidence of an increased conduction time. This, carried to an extreme (as in case No. 3) could produce heart block.

We have also observed minor complications or concomitants to erythroidine. Dizziness occurs early and in all cases. It probably has no significance. Three of our cases showed signs of nausea after erythroidine, but this was only for 30 to 40 seconds, and the feeling passed without any vomiting.

One of the patients seemed to have a dermal sensitivity, for she developed a discreet papular rash over the forehead, temples and bridge of the nose. This appeared on the morning after her first erythroidine treatment. She was seen by the dermatologic service, who stated that though they knew nothing of the effects of erythroidine, yet they were inclined to say that this was a drug eruption closely resembling bromoderma (patient had received no bromides).

Pallor and cyanosis to a varying degree was observed in almost every case. It was also noted that, although the patient quickly recovered from the effects of erythroidine, the pallor sometimes persisted for hours.

CONCLUSION

1. Erythroidine is a drug with marked curare-like effects.

2. Its intravenous administration to humans is attended by peripheral relaxation of skeletal muscles. The muscles innervated by cranial nerves are most susceptible, the diaphragm is least susceptible.

3. In conjunction with metrazol therapy it acts to diminish the intensity of the convulsion and thus prevents vertebral compression fractures.

4. Erythroidine is a drug with definite toxic properties. When given too rapidly and in too concentrated a dosage, it may seriously interrupt the conduction mechanism of the heart and cause death. Some individuals may show a marked cardiac susceptibility to the drug even when it is given under carefully standardized conditions.

5. Further study of the properties of erythroidine are necessary before its unqualified recommendation for general use can be made.

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Fallacious Views Concerning Rhinologic Surgery

The argument that intranasal surgery always impairs the physiology of the nasal passages does not hold in the light of present knowledge. Surgical procedures necessary to improve ventilation and drainage can be performed without sacrifice of important structures or of mucous membrane and are within physiologic limits. Fallacious views concerning rhinologic surgery are due in no small measure to poor end results in certain cases, but judgment of these cases should be impartial in relation to the circumstances surrounding each individual case. It is conceded that these surgical procedures, as those elsewhere, will not always result in cure. On the other hand, no one is qualified to state in specific instances how uncomfortable a patient would have been, or that he would have fared better, had an operation not been resorted to.

While the indications for nasal and sinus surgery have been pointed out, allowances must be made also for individual factors. These will often influence the rhinologist's decision negatively even though the indications are well defined. The individual rhinologist's attitude toward surgical procedure plays its role. A number of prominent specialists, who earlier in their careers depeneded almost entirely on surgery to bring about relief, now have turned utterly against operative procedure, placing their faith in specific immunization. The tendency to label every rhinologic complaint as allergic is irrational. It is equally as irrational to believe that every nasal condition requires surgical intervention.

The case of every patient with a nasal pathologic process should be dealt with as an individual problem. Treatment should meet the indications as they exist. There should be no preference for special therapeutic methods merely because one has become prejudiced against surgical or other procedures. Furthermore, unless experience has demonstrated the efficacy of the treatment to be employed, it should not be considered a suitable substitute for an operation when the latter holds out greater advantages for the patient in obtaining relief from his symptoms. Successful results of rhinologic surgical procedures are obtainable only when the specialist respects the same high standards and criteria that are established for general surgery.—A. R. Hollender, M.D., Miami Beach; Jour. Florida M.A., Inc., Vol. XXVII, No. 1, July, 1941.

Better dietary habits especially during the past 20 years, have enhanced inborn resistance to all diseases including tuberculosis.—Fred H. Heise, M.D., Amer. Rev. of Tuber., Feb., 1941.

The Nature and Modern Treatment of Depressions

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THERE are depressions in the world of business and depressions in the sphere of health. It is popularly believed that the former lead to the latter. Yet, the experience of the psychiatrist indicates that the majority of depressions are definite and clear-cut illnesses. The nature of these ailments, the factors which cause them, and particularly the treatment of this group of illnesses is the concern of this paper. Stress will be given to the modern chemical, so-called shock therapy.

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SYMPTOMS OF DEPRESSIONS

There are many types of depressed states ranging from a temporary feeling of dejection to the mournful grief of one who has suffered bereavement, and extending on to the feelings of blackest despair which may be part of involution melancholia. Our chief interest is not so much with the depressed feelings that accompany frustrations and losses, but with the more fundamental and more protracted illnesses proper. Everyone may become depressed, but only some have depressions.

Let us first consider the principal symptoms of these illnesses. At the outset, it should be made clear that such symptoms will depend not only upon the depth of the depression but upon the descriptive ability and dramatic capacity of each patient. Much though these patients have in common, there is still a decided individuality of symptoms. The commonest are as follows:

A. Change in Mood: The mood is dark and joy is lacking. The term, melancholia, meaning "black bile", is a word picture of the dark mood which prevails. Everything appears gloomy and discouraging. Experiences that ordinarily gave joy and happiness have become dull, flat, mechanical. The facts of these experiences remain, but the joy and coloring are gone. True, the late sun still shines, but not as the thrilling sight of a glorious sunset—no, it is a mass of departing red signalling the slow departure of one more sad day. The depressed patient may hear the singing of the birds and watch the play of children, but the bird is more like Poe's black raven and the laughter of the children's play is but a disturbing noise. The pleasure of the table and the joy of social contacts are gone. Instead, there are uneasiness, discomfort, and sadness.

B. Somatic Discomforts: The depressed patient is troubled by uncomfortable sensations. They all signify disturbed function of those regions or an intense hypochondriacal interest. There is introspection through lenses tinted dark by anxiety. The head feels hot, full, burning; the mouth is dry, sandy, and bitter; the heart is heavy and palpitates; the appetite is poor, bowels are sluggish; the legs are heavy and leaden. Recent laboratory work has shown ample evidence of physiologic changes to account for these discomforts. Strongin and Hinsie[1] have shown the marked decrease in salivary secretion that is common in depressed patients. Henry[2] has demonstrated the correspondence of intestinal tone with mood, with a tendency to sluggish motility in the depressed states. Ziegler[3] has assembled some of the common clinical features that are found in depressions.

The body no longer serves the patient silently and automatically. It now draws the attention of the individual upon himself. The patient feels wretched, jittery, uncomfortable.

One of the most graphic self-analyses of a depressed state was contributed by a patient of mine, a writer, who, when well, is a confident, attractive, charming person. When depressed, she writes of herself: "Like a cumbersome sea turtle waddling laboriously through the wet sand of the shore, each clumsy limb encased in a layer of sand to be shaken off or plowed through, its head furtively pulled in and out only enough to make a path of sand, but dodging the enveloping atmosphere, so do I heavily and figuratively encased in a layer of wet sand, move my limbs slowly and with laboring progress. Figuratively, I too pull my head into its skull bringing it out only enough to guide my sense of direction, willing, by pulling it in, to dodge any interference into my all-enveloping sphere of self-reflection. My world revolves only in the tiny mass of my being." At another time, she wrote: "My body seems a shapeless mass; a heaviness pervades my movement as though a weight were attached to my head, as though each foot were chained to a gummy morass from which each step had to

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free itself. My hands feel encased in mittens, powerless to grasp objects. Instinctively I shrink back from grasping, a fear that the object would escape me."

These few sentences typify the physical distress which certain depressed patients suffer.

C. Sleep Disorders: A few depressed patients can hide from collision with life under the warm covers of the bed and thus escape their troubles. However, the great majority are unable to sleep. They toss and squirm, a continuous stream of involved problems passing before them. If sleep does come, it is often attended by unpleasant dreams from which the individual awakens startled. The patient becomes fidgety, restless. He tries once more to fall asleep and again thoughts in an endless stream, memories of the past, dark, unhappy recollections fill the mind, and once more bring wakefulness. After hours of distress, morning slowly makes its long-awaited appearance, and the depressed patient greets the day with some relief and yet with fear.

D. Psychologic Factors: The depressed patient frets and fears and worries. Not only is he uncomfortable at the moment, but he fears that tomorrow will be worse. His self-confidence has vanished. In its place come self-doubt and self-depreciation. The degree of self-depreciation is evident in the analogy which the patient gave when she pictured herself as a lowly mud turtle.

Every task looms large, for the person is rendered small by his feeling of inadequacy. He feels unequal to any undertaking, however capable he has been in the past. Sometimes self-doubt is overshadowed by self-accusation. Patients frequently remark, "I don't amount to anything; I am totally unfit for my job. I have been inefficient, dishonest; I am guilty of neglect of duty; I have committed some moral misdeed." Occasionally a patient will discover some experience in the past, of considerable moment, which becomes the basis for this self-accusation. Frequently, however, it is only some trifling misdeed of adolescence that is considered a criminal offense. A depressed patient may be like a prosecutor of his own past, seeking evidence and preferring charges against himself. And, a person rarely fails to find evidence against himself if he is looking for it. A school teacher, for example, blamed himself relentlessly, to the point of believing that he would be discharged and publicly humiliated, because he had looked admiringly at one of his pupils.

Coupled with self-doubt is the element of fear. Depressed patients fear not only bodily troubles but social difficulties and even tragedies of a larger degree. For example, certain patients remark: "I have done such wrong that not only I will be punished but my entire family will be disgraced, arrested, and punished with me." The fears may be applied to health, finances, or reputation. "I am afraid I have cancer; I am losing my mind; my reputation is gone." Fear of death and fear of insanity are the most frequent.

Other psychologic features are inattention to the outer world and resulting memory defects. Both are associated with marked preoccupation with self.

In some patients, there may be more profound psychic symptoms, including hallucinations or delusions. To a large extent, the delusions are expressive of the tendency to self-accusation.

REACTIONS TO A DEPRESSED STATE

We have touched briefly upon several of the major symptoms which were considered basic. Let us now take up certain symptoms which may be called secondary because they are reactions to the depressed feeling.

A. Surrender: Certain patients surrender to this mood with a feeling of complete hopelessness and inactivity. The individual is content to sit, ignoring the outer world, with head and limbs droopy, entirely disinterested. The surrender appears to be accomplished by motor and mental retardation and may sometimes reach a state of stupor. The individual does not care to eat, read, or converse. He does nothing, he expects nothing. The battle is over. He has surrendered.

B. Escape Through Motor Activity: Complete surrender is uncommon; most patients show some fight, some effort to escape. Many are driven to muscular activity, fidgeting, marching. A few will take extremely long walks. Others will drive long distances, and I know of one young woman who obtains a feeling of relief only when she is flying a plane. Through such motor activity, the individual may overcome the inner tension which he suffers. At times, this motor activity is repetitious, consisting of twisting of fingers, endless pacing. At other times, the individual is able to work with a frenzy and thus escape.

C. Escape by Winning Sympathy: Though the average depressed patient prefers to avoid social contacts, yet he is also eager to talk about his own troubles. Such patients gain some relief, as does a traveler who removes a pack from his shoulder, by speaking his tale of woe.

D. Escape Through Alcohol: Alcohol often serves as a sweet anodyne to the pain of depression. And certain depressed patients find that this is a protective escape. Unfortunately, the escape itself may add further difficulties to the depressed patient. For example, with Dr. R. O. Egeberg, I saw a patient recently who had suffered a depression for several months, with marked insomnia. She found that a highball or two released her, so that she might get some sleep. In the course of weeks, the amount necessary to achieve the same result had to be increased. At last, this patient was drinking a quart of whiskey during the night and was finally suffering from both depression and alcoholism. One might remark that going from a depression to drunkenness is no better a solution than jumping from the frying pan into the fire.

E. Escape by Successful Activity: There are some depressed patients "who work off their tension" by frenzied activity. Some are able to direct this activity into some constructive channel and to accomplish worthwhile deeds. I know of one depressed patient who did metal craft work in his basement because he was unable to sleep. He achieved considerable success in this pursuit. Now, he has a national reputation for the artistic quality of his product.

F. Escape by Suicide: Tormented by inner unrest, tortured by insomnia, suffering today and dreading the morrow, blaming himself and believing that he is a burden to others—no wonder the depressed patient thinks of suicide as a way out! "I will relieve my family of this terrible burden and I will free myself of such endless suffering—I've got to end it all." And thus certain depressed patients debate between life and death. There is an impulse to self-destruction, and fear and inactivity deter him. Some depressed patients go through a series of steps that I have called the five D's: Depression, Debate, Decision, Deed, and Death. And suicide is the last step. The individual began with depression, debated with himself, finally decided on his course of action, performed the deed, and died.

GENERAL FEATURES OF DEPRESSIONS

Thus far, there have been recorded certain of the common symptoms, both fundamental and reactive. Let us now consider the implications and significance of these symptoms.

There are many types of depressions and also many causes. Depression may be part and parcel of some other illness or may be a distinct ailment by itself. For example, there are depressed states in paresis and as a phase of early schizophrenia. But, our concern at the moment is with essential depressions, of which two major forms are recognized, reactive and endogenous. The term, "reactive", applies to those depressions which occur as a reaction to a major defeat or frustration. We may picture a young woman who has been jilted in love, who has become humiliated and heartbroken and who thus may go into a depressed state. The term, "endogenous", is used to characterize those depressions which occur without obvious and adequate external cause, arising from internal forces. There are many types of endogenous depressions, but, for the sake of simplicity, we shall consider them as a group. Many authors believe that patients who react with a severe depressed illness to some defeat or frustration also have the endogenous tendency. We shall concern ourselves with depressions as a whole, considering largely those illnesses which in the past have been looked upon as the depressed phase of a manic-depressive psychosis, as involution melancholias, agitated depressions, and so forth. Because of the many common factors in these illnesses, it may be practical to consider them as one group. Several of the features are worthy of review:

A. The Spontaneous Character of Such Depressions: At times, depressions begin abruptly, for no obvious reason. In the midst of wealth, security, and apparent happiness, this illness may set in.

B. The Recurrent Tendency of Depressions: It is well known that certain depressed patients have several attacks during a lifetime. My experience corresponds with that of Pollock[4] who made a statistical study of such recurrences. It is not rare to find that a patient who is depressed at the age of 45 has had two or three previous attacks, let us say, at the age of 20 and 30.

C. Depressions Are Constitutional: It is recognized by many psychiatrists that the predisposition towards this illness is significant. It is common in obtaining a family history of a depressed patient to learn that an uncle, aunt, cousin, or some closer relative has suffered from a similar illness. Bleuler[5] states that, "as a definite cause of manic-depressive insanity, we know only the inherited disposition where the definite forms of the disease may substitute one another. . . . One can take for granted that about 80 per cent of all these patients are tainted." Gibson[6] also stressed the constitutional factors in this illness. He refers to Kraepelin and Suenner, who found as high as 80 to 85 per cent family history in their manic-depressive group of patients.

D. Depressions Are Sometimes Self-Limited: It is not rare to find that an individual who has been depressed for anywhere from three to twelve months may make a spontaneous recovery. Frequently the recovery is complete, with little or no residual change in the personality. One may conclude that the depressed state, however severe, is a reversible reaction and has not been attended by a serious structural brain damage.

E. Depressions May Be Part of a Cyclic Illness: Depressed states may be followed by or may themselves follow manic illness. Since the days of Kraepelin, the close association of the elation and overactivity of the manic state and the apathy, depression, and inactivity of the depressed illness has been noted. Indeed, depression and mania were looked upon as alternating phases of the same illness. It is remarkable that a patient may go along for months, gloomy, morose, and morbid, and then suddenly swing into action with a bounding self-confidence, speeding, speaking, enjoying all. The depressed individual who a few days previously was picturing his own inquest is now engaged in a world conquest. Thus, a depression may be but a phase of a biologic cycle.

Cyclic disorders are a common feature in nature and in man. The seasonal cycles and the changes of day and night are familiar to all of us. One may mention the parallel of the menstrual cycle in women with the lunar cycle. Nor is the menstrual cycle purely a physical phenomenon, limited to the uterus and its menstrual flow. On the contrary, there is a greater change involving personality and mood. It is not rare for certain women to experience a premenstrual depression characterized by sadness, weakness, self-depreciation, and weeping. And this same woman may become rather cheerful and almost elated several days after menstruation has set in. This premenstrual depression undoubtedly represents the influence upon mood and emotion by certain glandular and chemical forces in the body.

F. Depressions and Bodily Changes: Depressions tend to occur more frequently during the periods of life of marked glandular change downward. It is extremely rare for depressions to occur before adolescence and I can recall no single instance in my practice, despite the fact that children do experience injury, illness, and defeat. Depressions are decidedly most common in the fifth decade, both in men and women, but particularly in women. Pollock[4] has contributed a statistical study on this subject in which he stated: "Manic-depressive psychoses are much more frequent among females than males. . . . The highest rate of incidence among females occurs during the fourth and fifth decade."

G. Pre-Psychotic Personality: Depressions are considered more common in individuals whose pre-psychotic personality is inclined to be meditative and worrisome. Titley[7] has written on the "pre-psychotic personality" of patients with depressions and has emphasized the frequency with which the following personality traits are found: narrow interests, stubbornness, rigid ethical code, reticence, asocial and unfriendly attitudes. Grinker[8] mentions "the perfectionistic rigid character of the depressed with an overly strict conscience".

INTERPRETATION OF THE BASIC AND SECONDARY SYMPTOMS AND THE COMMON FEATURES IN DEPRESSIONS

Let us assemble these observable phenomena and attempt to deduce some formula for the depressed states. We may then arrive at an interpretation such as the following: Mood is a quality of the body and the personality which is inherently variable and subject to fluctuation. Whereas body structure and, let us say, intelligence are relatively static, mood represents one of the changing physiologic features. Mood and its emotional counterpart belong to the cyclic phenomena in nature. And mood is influenced by both inner forces and external factors. Petersen and Reese[9] have contributed an important paper emphasizing the direct influence of atmosphere upon bodily processes. Situations and experiences likewise affect the mood tremendously. And inner changes, particularly the growth of youth and the shrinkage in the fifties, produce reverberations in this quality of bodily function. The growth of adolescence frequently induces an expansive feeling while the shrinkage in the later periods of life produces contractions and withdrawals.

Among those who are constitutionally sensitive or predisposed, the glandular changes in the late forties are responsible for a marked depression of the mood. It is my belief that the inner processes are of tremendously greater importance than frustrations and defeats and other life experiences. Indeed, one may postulate the theory that chemical changes arising in certain glandular processes are actually injurious to mood and emotions, "thymotoxic". In such patients, there is more than a depressed feeling, there is a deep, prolonged illness—a depression, and such a depression is all-pervading and all-enveloping. Practically every function of the body is disturbed, every region affected, and all thought processes are directed towards gloomy and pathetic attitudes. One may question the psychoanalytic theory that depressions result from the superego's attack upon the ego because of guilt. True, this formula is common, but the self-accusation is the result of the tendency of the depressed mood to command the individual to become his own prosecutor. The mind then searches the past to discover some deed, trifle or crime, with which to accuse itself. A depression continues for a long period of time but spends itself because inherently it is part of a cycle. If suicide does not intervene or if senile changes do not add their heavy hand, then the mood swings upward either slowly or abruptly, the depression changes to well-being or even to elation. This swing from the depths of depression to the heights of elation could hardly be explained by the theory that the superego is attacking the ego. It is best understood by the inherent tendency of mood to be cyclic.

This concept of depressions is presented as a working hypothesis to better understand the therapeutic approach to this illness.

TREATMENT

It is not difficult to diagnose a depression, yet the relief of the patient's symptoms and the restoration of the individual to a state of well-being is one of the most difficult problems that confronts physicians and nurses. It may be advisable to review certain of the measures which have proved beneficial.

A. Psychotherapy: The patient who is depressed needs the comforting reassurance of his fellow men and women. He is eager to unburden his sufferings to all who will listen to him, yet frequently he is met with jeers and ridicule and sarcasm: "Oh, forget about it. Snap out of it, there is nothing wrong with you." These remarks are verbal darts which will become embedded even more painfully in the soul of the patient. He recognizes that he does not wish to be ill; he would like to be free of the torment of a saddened mood. He needs sympathy. Remember that the depressed patient is really sick.

The doctor in charge of a depressed patient should encourage him to talk. As a tool of psychotherapy, listening is far more effective than lecturing. Formal psychoanalysis, however, is to be discouraged because, during this treatment, the ego is revealed in an unpleasant light and the further depression of the ego may precipitate suicide.

Within the scope of psychotherapy, one may include reassurance, encouragement, guidance as to activity, and various occupational programs. Along with sympathetic listening, the physician and nurse should attempt to give hope by repeating words of encouragement as to recovery and a happier future. Patients need such encouragement and are temporarily relieved by words of cheer.

Among activities, routine amusements that do not require long concentration or serious planning are the best. Walking outdoors, gardening, knitting, and possibly woodwork are pursuits which the average depressed patient may undertake and derive some satisfaction from his achievements. Simple tasks which are feasible are better than major undertakings in which the individual might fail.

The significant feature of psychotherapy is the recognition by physicians, attendants, and family that the patient is really ill. True, there may not be clear-cut evidence of organic disease, merely because our diagnostic facilities fail to detect disorders of spirit, mood, and emotions. But, the absence of organic disease does not give us the right to scoff at the symptoms nor to belittle the personality of the depressed patient. Encouragement, reassurance, sympathy are far more helpful than scoffing and ridicule.

B. Symptomatic Therapy: Symptomatic treatment includes those agents which tend to offset certain of the discomforts and help to relieve some of the major symptoms.

(a) **Insomnia:** For the relief of insomnia, various measures have been advocated. A long walk is beneficial to some individuals; a warm tub bath relieves many. Some beverage, such as warm milk, following a warm bath, helps. These measures are usually insufficient and the patient frequently needs the assistance of some chemical sedative. There are certain physicians who condemn the use of sedatives for depressed patients. The opposition is based upon the fact that it is "artificial sleep", that the sedative habit may be formed, and that some patients are left drugged and drowsy the next day. There is some truth to these protests against sedatives but, by and large, their advantages far outweigh the disadvantages. The distress of a long night of vigilance with fear and worry, pacing and panting, is far more harmful to the nervous system than the use of properly selected sedatives. Furthermore, most depressed patients who recover discontinue sedatives voluntarily. It is rare for the use of such medication to become habit forming. The choice of a sedative will depend upon the individual and it is a common experience that the medication may have to be changed from time to time in order to get the best possible effect.

(b) **Weakness and Tiredness:** For the weakness and tiredness, certain preparations have recently been introduced. It has been found that benzedrine sulphate in proper doses will, in many patients, increase dynamic energy. (Myerson,[10] Dub and Lurie[11]). Retardation and inactivity may be converted into energetic activity. Some patients are rendered uncomfortable by benzedrine, but it is worthy of trial. This medication, of course, is rarely given late in the day because it may induce wakefulness.

(c) **Digestive Symptoms:** The bitter taste in the mouth and loss of appetite may be helped to some degree by fruit juices and by mints held in the mouth. The constipation, which is so common in this illness, will need appropriate laxatives.

(d) **Nervousness:** Nervousness may be allayed by mild sedative medication such as bromide and phenobarbital, and even better by some type of physiotherapy. Under this heading, of course, is included baths of various kinds, such as showers and sprays, massage, and forms of electricity and heat. A nervous patient may be calmed by a warm bath followed by gentle massage. In the mornings, a cool shower may serve as stimulation to activity.

(e) **Prevention of Suicide:** The tendency to self-destruction is present in severe depressions and it is therefore the duty of those responsible for such patients to protect the individual against this threat. All that has been mentioned up to this point will be useful in giving the patient some comfort, some hope, but further guarding is sometimes necessary. If the patient is at home and severely depressed, the objects of self-destruction must be out of his reach. I refer particularly to "poison pills", sleeping potions, firearms, and the key to the automobile. It is best to safeguard the patient by protective companionship. If it appears that the suicidal threat is imminent, then the protection of the home environment is usually inadequate—and hospitalization is urgent. Menninger ("The Human Mind") emphasizes that the need for protection may be compared with any emergency in surgical practice.

(f) **Endocrine Replacement Therapy:** The frequency of depressions at the menopausal period leads to the view that a glandular change may be responsible for this illness. It was therefore logical to use glandular preparations in the hope of relieving the symptoms. At the outset, certain writers reported successful results with hormone therapy. For example, Werner[12] found that theelin was remarkably beneficial to women going through post-menopausal anxiety and depressed states.

However, other writers have been skeptical as to the benefits of hormone therapy. For example, Schube et al[13] reported a control series of patients and found that those who received estrogenic substances did not fare any better than those without them. In my own personal experience, I have found that certain patients may gain some relief of hot flashes from this medication, but the majority did not show basic improvement. This experience is applicable to those patients who have had preceding attacks of depression. Obviously, if a woman has had a depression at the age of 20 and again at 30, a third attack coming at 45 cannot be ascribed solely to the glandular changes of menopause. In severe or prolonged depressions, when the above measures are inadequate, other measures such as shock may be needed.*

C. Shock Therapy: In the short space of some five years, experience has shown that metrazol has a field of usefulness in the depressed states. Von Meduna,[14] Bennett,[15] Young and Young,[16] Low,[17] Wilson,[18] and others have reported excellent results by this therapy in all forms of depression, particularly in the agitated and involutional melancholias. Successful results, ranging from a moderate improvement to a complete restoration of normal activity have been obtained in a high percentage of cases. Some authors claim over 80 per cent recoveries. My own experience in some 60 cases has been remarkably encouraging and the percentage of recoveries high.

It is recognized that shock therapy has not been without difficulties and complications. True, fatalities have been exceedingly rare, but fracture complications have been many, and the distressing ordeal during and after treatment has been a handicap. Such complications and difficulties were more frequent in the earlier use of metrazol than at present. This improvement has resulted from the constant efforts to lessen the unpleasant side actions and complications.

The incidence of fractures has been decreased as a result of two methods. The one consists of the use of drugs such as curare in order to reduce the violence of muscular contraction during the convulsion. Bennett[19] introduced this procedure and has found it valuable. Other physicians have employed mechanical means such as the hyperextension of the back over a sand bag and some form of manual restraint (Rankin[20]). One or the other of these techniques has definitely lowered the fracture complications.

To insure smoother action of the metrazol and to prevent the precoma sensations, several methods have been proposed. Edlin and Klein[21] recommended the use of scopolamine hydrobromide, gr. 1/100, one hour before the metrazol injection as a means of allaying fear. Psychotherapy alone has been successful in allaying fear in many patients. To minimize the precoma distress, a large dose of metrazol will usually be more efficacious than smaller trial doses. Hackfield[22] has found that the larger doses are more certain of producing rapid coma. In my own experience, an initial dose of from 6 to 10 cc. will almost uniformly bring about a coma, with practically no aura and with amnesia for the treatment. This recommendation of Hackfield's has been valuable in preventing subconvulsant reactions.

In order to make the post-convulsive period more restful, I have used intravenous amytal in certain patients. The dosage has consisted of 3 to 7½ gr. intravenously.

With these improvements, the complications have been reduced without lessening the therapeutic efficacy. (Fetterman[23]).

The actual treatment consists of a course which has averaged seven injections. The beginning dose has been approximately 8 cc. of a 10 per cent solution. The succeeding doses are given at intervals of every two to three days, using 1 cc. or 2 cc. more with each treatment. I have found that this additional dose of metrazol has not led to any difficulties and has insured almost 100 per cent successful coma reactions. As a rule, some improvement is noted between the third and fifth injection, but several additional treatments are given in order to prevent relapses.

AN EXPLANATION OF THE THERAPEUTIC SUCCESS OF METRAZOL (ELECTRICITY)

As an aid to the understanding of the mechanism of the therapeutic action of metrazol, let us go back to the theory of depressions previously mentioned. Depressions are illnesses whose somatic and psychic symptoms are the expression of a downward course in the mood. There is a profound downward course in the emotional functions, which course has the inherent cyclic tendency to curve upwards after it has run a certain period of time. In the depression, we see a prolongation of the mood curves, but the inherent tendency of cycling remains. The metrazol coma and convulsions are a profound upheaval. At the depth of the coma, all cerebral processes are at near zero (agonal) level save for those vegetative processes essential to life itself. In this coma, a chemical or electrical disruption occurs which proves to be therapeutic. What actually takes place, we are not able to say, but we may conjecture as follows:

If one is to assume a toxic cause of depressions, then the metrazol treatment may be considered detoxifying. This, however, is a pure assumption without factual basis. Another view is as follows: In the depth of the coma, the depression is allowed to run its course and the patient is enabled, upon awakening, to return to his normal, cheerful self. Each coma may be likened to a hammer blow which shatters the links of the chain of forces which are part of the depression. Grinker[8] proposed the theory that

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*Since this paper was submitted, I have used electro-shock therapy in place of metrazol. With either method, there are obtained coma and convulsive reactions as well as therapeutic success. The outstanding advantages of electricity consist of the ease of administration, the freedom from dread, and the easier post-convulsive recovery.

"metrazol-induced convulsions may explode the diencephalon, opening up blocked pathways to the cerebral cortex." There are several clinical observations which support the view that the coma breaks up physiological links of the depressed chain and enables a return to normal. First, after certain treatments, patients show a marked amnesia which may last for hours or days. This amnesia points to a probable physiologic disruption of association pathways. As a rule, the memory functions then return.

In the second place, successful treatment usually is achieved by a series of treatments. Although there may be a glimpse of betterment in the earlier treatments, the depression returns until the fourth to the eighth coma and convulsion have completely removed the depression. Thirdly, metrazol is successful not only in removing depressions but also in allowing a patient who is manic to regain his normal emotional tone. In other words, in whatever direction the mood has swung, metrazol removes the symptoms and enables a return to normal mental processes. Fourthly, after metrazol treatment, not infrequently one sees not merely a return to the average well-being but a temporary vivaciousness and elation that resemble a hypomanic state.

The theory that the threat of death is responsible for recovery is not supported by the observable facts. Patients terrorized by subconvulsant doses experience the threat of death in a horrifying manner, but do not improve. Patients who go into coma without realizing that they have had a treatment do much better. My experience concurs with that of Cook[24] that fear is not of major therapeutic significance in convulsive therapy.

SUMMARY

This paper has sketched the modern concept of depressions as illnesses. The various treatments for these maladies have been discussed. The favorable experience with metrazol shock therapy is reported and its further use encouraged for patients who do not respond to milder treatments. It is realized that metrazol shock is far from the final word in depressions. At present many psychiatrists are using electric shock in place of metrazol. Perhaps in the future, preventive measures and other milder programs of treatment may prove even more efficacious.

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The Intensive Treatment of Syphilis

The recently proposed five-day ultra-intensive treatment procedure for cases of early syphilis is arousing great interest. If proved both safe and effective, it will revolutionize the management of such early infectious cases. Arsenoxide (mapharsen) is administered by continuous intravenous drip at the rate of 20 mg. of mapharsen in 200 cc. of 5 per cent glucose per hour for 12 hours daily on five successive days. This represents 240 mg. of mapharsen in 2400 cc. of 5 per cent glucose administered daily, or 1200 mg. (1.2 gm.) of mapharsen in five days (20 standard 60 mg. doses). This method of treatment is truly heroic. A rather high incidence of reactions (some potentially fatal), is reported. Further observation and data from well-controlled, hospitalized cases is necessary before such treatment can be recommended or even considered for general use.—Loren W. Shaffer, M.D., Detroit; Jour. Michigan S.M.S., July, 1941.

Public Health Aspects of Trichinosis Control

E. R. SHAFFER, M.D.

By way of a preface may I quote from authorative sources, figures concerning the incidence of trichinosis during the past century. These statistics are necessarily incomplete inasmuch as only 32 states, including Ohio, require the reporting of trichinosis. To find figures for the other states, information is taken from Medical Journals and other sources of information. As reported and compiled by Ransom for 1842-1914, of 1,575 cases and by Sawitz[1] for 1915-1936 of 2,968 cases indicates that a total of 4,543 cases of trichinosis have been diagnosed and recorded in the United States during 94 elapsed years. The number of cases recorded and otherwise reported amounts to around 6,000 in all. So we are not confronted with anything new so far as our local outbreak is concerned. The mortality rate for trichinosis cases has decreased from 15.4 per cent for 1842-1914 to 4.4 per cent for 1926-1936 indicating that more mild cases are now diagnosed and reported than formerly. These cases were either formerly overlooked or else occur more frequently. Assuming the latter, it may be due to the fact that nowadays pork products are usually made up from several hogs by modern processing and thus a Trichinella-infested hog has the chance of infesting more people than formerly, while at the same time the infection is less severe. This could also explain the high percentage of post-mortem diaphragmal examinations of positive specimens from persons dying from other causes. Wright[2] reports that up to the present a total of 4,975 examinations have been made of diaphragms from persons dying in hospitals in 35 states and the District of Columbia. Examinations by other laboratories have totaled 5,531. At this writing 10,424 examinations have been made of which 1,547 or 14.8 per cent were positive for the parasite. On a basis of Ohio population this would indicate that there are 960,000 persons in Ohio having infestation of trichinosis. This average percentage applied to the living populations would mean that 17,000,000 people in this country are infested with Trichinellae Spiralis. The speaker is of the opinion that many of the cases of so-called intestinal "flu" may be abortive cases of trichinosis. The symptoms are quite similar.

There is a definite seasonal fluctuation in the occurrence of trichinosis, with the peak in the winter months, primarily following Christmas and New Years holidays due to the fact that large populations of foreign descent are prone to continue their like of tasty meat preparations containing at least some pork. These cold raw or partially cooked meat products are most frequently responsible for infection of trichinosis.

States having the highest morbidity rate are those of the extreme eastern and western sections. Abundant evidence indicates quite clearly that trichinosis is probably a greater problem in the United States than in any other country in the world. The evidence to this effect was available about 50 years ago, but was quite generally overlooked, disregarded or misinterpreted. Many public health officials believe trichinosis is one of the most important public health problems today.

The Author

● Dr. Shaffer, Akron Ohio, is a graduate of Starling Ohio Medical College, 1911; fellow American Public Health Association; member American School Health Association, Ohio Federation Public Health Officials; director. Summit County Department of Health.

EPIDEMIOLOGY OF CASES IN RURAL SUMMIT COUNTY

Not in connection with nor related to the present Akron outbreak, there occurred in rural Summit County four cases with one death. The first case, according to epidemiological history, occurred about three weeks prior to being reported to the County Department of Health, and residing at Stow, and referred to for the purpose of this report as Madam X.

This mother and housewife gave a history of having been taken ill while visiting in Michigan. It was her repeated habit, when preparing the ham steaks for her family, to slice off a shaving of raw ham and eat it on numerous occasions. Thus she was the only victim in this family. While in Michigan she was hospitalized for three weeks, on return home at the advice of her physician in Michigan she was to report to her local physician which she did and who then reported the case. The purchase of the infected ham was traced to a roadside meat market in an adjoining county, whose health department on request, traced its purchase from a large provision company located in a city of another adjoining county who purchase most of their swine from sources outside of either county.

This case occurred on September 6, 1940, and is recovering without apparent complications. Cases 2 and 3 represent husband and wife residing in Franklin Township and who made a business of slaughtering swine and processing

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Submitted April 12, 1941.

the meat for neighbors and others for hire. Mr. "S", 47 years of age, and Mrs. "S", 39 years of age partook of raw trichinae infested sausage during the testing of seasoning process, according to the history of the cases. Both individuals were quite ill for a period of 30 days.

Case No. 4, a son, age 17, of Mr. and Mrs. "S" who was fond of raw sausage upon returning home from school at this particular time partook abundantly of the sausage thus receiving a heavy dose of the Trichinae infested sausage. He became extremely ill, was hospitalized and died on December 16, 1940. Diagnosis was made on autopsy and subsequently so was the diagnosis of Mr. and Mrs. "S" established after the post-mortem diagnosis of the son. Attention of the County Department of Health was incidently called to these cases on report of a rumor picked up through the "grapevine" route by a member of the County Board of Health.

Epidemiological investigation elicited the history that a Mr. "J" had received the processed meat from Mr. "S" and had moved his family to the city of Akron. No one could be found who knew the address of their new residence in the city. However, after 48 hours search the county food inspector succeeded in locating the "J" family and advised them regarding the Trichinae infested pork. Fortunately this meat had been all canned in the meantime and what had been consumed undoubtedly had been thoroughly cooked. No cases resulted in the "J" family. The fact could not be established whether or not these swine had ever been fed on garbage or pork offal, Mr. "J" denied that they had been while under his supervision.

Three other residents of the rural section of our county are victims and whose source of infection was that of the majority of the others in the city of Akron and who are hospitalized in Akron and are included with those cases so reported, and who apparently, are recovering.

PREVENTION AND CONTROL MEASURES

From the public health viewpoint the problem of trichinosis in the human being in the United States rests primarily on a basis of swine trichinosis, and swine trichinosis rests primarily on a basis of feeding swine raw or inadequately cooked scraps of pork in garbage. The rat plays a minor and not definitely ascertained part in the production of swine trichinosis, in spite of the fact that rats show a high percentage of infestation with Trichinella Spiralis.

Evidence is abundant to the effect that swine trichinosis results from infested pork scraps, offal and the like, fed to swine through the practice of this method of garbage disposition by municipalities of the United States. The prevalence of pork scraps in our American garbage is well established and results from economy of abundance that permits of discarding to the garbage pail meat unsatisfactory from the standpoint of health or esthetic considerations plus a certain amount of waste. The high incidence of Trichinella Spiralis found in garbage fed hogs and hog-lot hogs fed on slaughter-house scraps and table scraps, and the very low incidence or entire absence of Trichinella Spiralis in hogs raised in fields, woods or pastures and fed in a scientific and sanitary manner and even in packers yards where fed on cooked meat and grain. This evidence can be documented by many references and an adequate sample of such references has been published by the late Maurice C. Hall,[3] Chief Division of Zoology, National Institute of Health, United States Public Health Service.

Following numerous studies by many authorities it has been found that approximately 5 per cent of swine fed on garbage are infested with Trichinae, whereas about 1 per cent of grain fed animals are found infested. In a survey conducted by Wm. H. Wright, successor to Hall, deceased, and reported June 14, 1940, it was determined that a total of 296 cities of 10,000 population or more out of 764 cities replying to the survey questionnaire disposed of municipal garbage (pushed it off on their country cousins) entirely by feeding it to swine while an additional 107 cities disposed of part of the garbage by feeding to swine. Thus a total of 403 or 52.7 per cent disposed of municipally-collected garbage in whole or part by feeding to hogs.

Incineration was practiced by 197 cities at the time of the survey, to which number now can be added our own city of Akron, at least making 198 cities who have realized the importance of modern sanitary disposition of municipally-collected garbage in the interest of public health, comfort and welfare instead of wishing it on their country cousins.

Their results show that a surprisingly large percentage of cities included in the survey dispose of garbage by feeding it to swine and that this method is employed more frequently than is any other single method of disposal. While no reliable figures are available, it seems probable that this method is used frequently, or even more frequently by smaller communities in which revenue from taxation is not sufficient to provide for more sanitary methods of disposal. The National Institute of Health reports that "American Municipalities either directly or indirectly are probably the largest feeders of raw garbage to swine and would therefore appear to be chiefly responsible for the dissemination of trichinosis. We have been informed that many garbage feeders avoid marketing their hogs in federally inspected packing plants in order to obviate price differentials resulting from condemnations under federal inspection for disease conditions, other than trichinosis, which are common in garbage-fed hogs."

Even in the presence of federal, state or municipal inspection service, and even if microscopical examination is available, there will be approximately 32 per cent error. Therefore, meat inspection service is only one factor in the control measures and so far as trichinosis is concerned, a minor factor of safety.

The primary and most effective measure of control as a preventive is the reduction or even elimination of infestation of trichinae in pork by means of prohibiting the feeding of raw pork scraps as found in uncooked garbage. Either by selling incineration disposal to municipalities or by requiring the cooking of all garbage before feeding to swine. It can be done. In fact it has been done in many counties and even countries. It is compulsory in Canada for all garbage not originating on the premises where it is fed. England also requires this method of control where incineration is not practiced.

The swine grower who follows the Bureau of Animal Industry system of swine sanitation does not contribute materially to the incidence of trichinosis either in animal or human beings. The speaker holds that the best single factor in trichinosis control program is that influence which the meat packer may exercise over the swine grower who continues to produce our pork under unnecessary insanitary conditions and environment. The packer if he chooses is in a position to require that what he buys meets certain reasonable specifications and to refuse to purchase swine which does not meet those specifications. By virtue of his extensive and well organized forces and his long and intimate association with the swine growers and dealers, he can carry out such a program. Failure to do this, continues to do the swine industry and the packer an injury and justly points a finger of condemnation at the industry as a whole.

The big packing houses have accomplished much in the way of disease control, and will undoubtedly support a program of trichinosis control.

Legislation exercising trichinosis control is just as much justified and should form a part of official public health regulations as does bovine tuberculosis, Bangs disease and rabies control measures, the combined morbidity of which are less than the incidence of trichinosis in the people of the United States.

The speaker holds nothing but contempt for those members of the Veterinarian profession who insist on engaging in garbage feeding hog industry for their personal gain at the expense of contributing, knowingly, to the morbidity and mortality of the innocent trichinosis victims; or the unscrupulous packer or dealer who will knowingly purchase garbage-fed swine and process the carcasses in semi-cooked meat products, of which the consumer is extremely fond, in spite of the fact that it is known that thorough cooking will remove all danger from meat products.

CONTROL OF OUTBREAK

In addition to a thorough epidomiological investigation of the source and distribution of trichinae infected pork in the presence of an outbreak, it is the duty and responsibility of the local Department of Health to advise, admonish and insist on the general population to consume only **thoroughly** cooked meat and meat products. In no case should raw or "rare" meat of any kind or type be eaten. There are other infections which may be contracted from ingestion of raw or partially cooked meats, in addition to trichinosis which is only found in pork.

Literature and posters setting forth the facts of the situation should be disseminated for the benefit of the general public. In this, an important factor, is the fact that in most community outbreaks of trichinosis the great majority of cases will be found among those residents of foreign nationality, particularly those of German and Italian birth, because of their fondness for cold, lightly cured or lightly smoked meat products containing pork. Many speak and read only their native tongue and language. Special efforts should, therefore, be made by the health authorities to have these posters, leaflets and press information printed in their languages and displayed at places, such as markets where pork products are distributed primarily to these persons.

Another factor in the control of an outbreak of trichinosis frequently overlooked and which is of some importance is the problem of home refrigeration units.

Frequently portions of meat and meat products which may be infested with Trichinella Spiralis, is refrigerated in the home unit, capable of keeping the product in a wholesome condition but not at a sufficiently low temperature to destroy the trichinae, thus making readily available lunch meat for repeated indulgence, and permitting repeated doses of possible infested meat. This practice may result in an active case, whereas, less frequent ingestion of the product might have resulted only in an abortive or mild case of the infection. The public should be warned against this danger. This situation was definitely experienced in connection with the present outbreak. Incidentally, this same policy may be responsible for spreading the infection to other communities by presenting in good faith a portion of their tasty and apparently innocent tit-bit to their relatives or friends in distant or near communities as a gift of goodwill. Likewise this incident was also experienced in connection with the present outbreak. It, therefore, can be concluded that the home refrigerator unit is a factor of some importance in our efforts of control.

Proper refrigeration has its important and effective place in the prevention and control of trichinosis. Infected pork which is subjected to low and quick reduction of temperature will definitely destroy Trichinella Spiralis. This temperature must be at least 0°F. and held for 24 hours, or 5°F. for not less than 20 days. This procedure is and has been practiced by many leading meat packers in recent years and has been an important factor of prevention, and could be instrumental in greatly influencing the control if universally practiced.

STUDIES OF CONTROL

The incidence of trichinosis and its contribution to the nation's general mortality rate is of sufficient public health importance to justify statewide studies by official commissions appointed by the General Assembly of the State with authority to carry on a thorough epidemiological investigation, including the swine growers, dealers, packers and public health control measures viewpoint with power and responsibility to report recommendations for the control and prevention of trichinosis.

In fact your County Department of Health has already made such request of the Governor and Senate of the 94th General Assembly of Ohio.

New York State took such action and appointed a Trichinosis Commission last year with instructions to report its recommendations to the New York General Assembly on or before February 1, 1941.

SUMMARY

1. Garbage-fed swine have trichinae five times as frequently as do grain-fed swine and are the principal sources of human trichinosis.

2. Trichinosis in swine is apparently traceable to the eating of uncooked pork scraps in garbage, table scraps, slaughter house offal, swill and similar things.

3. The garbage-feeding industry, as ordinarily carried on, is dangerous to the health, comfort and welfare of man and livestock, esthetically objectionable and often times economically unsound.

4. The public should be warned to cook not only pork but all meats thoroughly.

5. If municipalities persist in disposing of their garbage by feeding to hogs, legislation should be instigated requiring cooking of garbage before feeding.

6. Pork products which are to be consumed should be properly processed whether for intrastate or inter-state commerce.

7. There should be appointed a Trichinosis Commission having state-wide jurisdiction of investigations.

8. Since the annual pig crop is consumed annually, any improvement in feeding and marketing put into effect one year should have its results in control the succeeding year.

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Tuberculin Testing in Chicago Schools

This survey was carried out by the Chicago Municipal Sanitarium, aided by the Tuberculosis Institute of Chicago and Cook County.

The survey policy of the Municipal Tuberculosis Sanitarium had hitherto been largely oriented toward older groups. Tuberculin testing in the schools, therefore, represented a deviation from established policy and was undertaken in order to explore educational values, morbidity rates, and case-finding potentialities of a follow-up of the reactors and to check on existent case-finding machinery.

As the purpose was to obtain a cross-section of tuberculosis morbidity, the survey attempted to include every Chicago school. However, it was necessary to sacrifice certain ambitions, such as a 100 per cent consent and a thorough survey of each school. In a general way, the policy ran, "Get what consents you can in the time allotted and go on to the next school."

Kindergarten, first and eighth grade children and all available students in the high school were examined because a positive reaction in a kindergarten or first grade child might have some epidemiological significance; eighth grade children were on the threshold of adolescence and many would not go to high school. Thus it might be their last chance of inclusion in a case-finding effort. In view of the many studies already made, justifiability of high school examination was hardly debatable.

SUMMARY

During the three-year period, 167,345 children were tuberculin tested and 23,532 X-rayed. The reactor incidence was 7.04 per cent for kindergarten and first grade, 19.82 per cent for eighth grade, 21.29 per cent for high school students and 29.97 per cent for miscellaneous schools and colleges. The rate for Negroes was twice that of whites and for Mexicans it was still higher.

This study shows a substantial drop in the reactor rate in Chicago as compared with older studies. The city-wide survey emphasized the fact that each district had its own reactor rate which was allied to local mortality rates.

Of 57,481 children under twelve tested with tuberculin, nine cases of pulmonary disease were found, which is comparable to figures for this age group in the mortality tables. Facts point toward the adolescent and early adult years as the case-finding provinces. In testing adults in highly infected milieus (60 per cent reactions or more) X-ray of the entire group is cheaper than tuberculin testing with X-ray of the positives.—Bulletin, Chicago Municipal Sanitarium, Vol. 18-19-20, Years, 1938-39-40, 1-12, inc.

Case of Acute Bacterial Endocarditis and Septicemia During The Puerperium

SIMON KOLETSKY, M.D.

A TWENTY-FOUR year old white primipara at term was admitted in labor to Maternity Hospital on November 15, 1940, following a normal prenatal period. Labor lasted 13 hours and delivery was uncomplicated, no forceps being applied. A left medial-lateral episiotomy was performed. The placenta and membranes were delivered intact.

The patient was known to have had rheumatic heart disease prior to pregnancy, and on her admission revealed the typical signs of mitral stenosis. There had been no cardiac decompensation.

She was entirely well until the second day postpartum when she developed chills and fever. These recurred daily until the time of her death on the 20th day postpartum. Outside of chills and fever the only other persistent complaint was that of constant headache. At first, blood cultures were positive for Staphylococcus aureus hemolyticus, but later yielded Streptococcus agalactia (B group of Lancefield). She was first treated with sulfathiazole, then with sulfanilamide and also received numerous blood transfusions.

During the first 10 days of the puerperium the only positive physical findings consisted of an enlarged heart with a loud harsh apical presystolic murmur and diastolic murmur over the aortic area. The fundus receded normally and was not tender, the breasts were negative on examination, the puerineal wound healed satisfactorily and the lochia was moderate in amount and not foul.

During the latter part of her illness the patient showed numerous petechiae of the skin. There was numbness and tingling of the right foot. Dyspnea and cyanosis developed together with a moderately severe anemia. Urine examinations revealed occasional red blood cells. Two days prior to death there was persistent cough with expectoration of frothy, reddish-brown sputum. The dyspnea and cyanosis increased, the patient became comatose and died on the 20th day postpartum.

The final clinical diagnoses were: Streptococcus septicemia, rheumatic heart disease with mitral stenosis, and acute bacterial endocarditis.

At autopsy, diagnoses were made of septicemia (Streptococcus agalactia), acute vegetative bacterial endocarditis involving the mitral valve, chronic rheumatic heart disease with aortic and mitral valvulitis and mitral stenosis and insufficiency, cardiac hypertrophy and dilatation (375 grams), confluent broncho-pneumonia, bilateral, acute fibrinous pleurisy, acute hyperplasia of spleen, recent septic infarcts of kidneys and spleen, thrombo-phlebitis of the pelvic veins, passive hyperemia and fatty metamorphosis of the liver, passive hyperemia and fatty degeneration of the kidneys, recent thrombosis of the right internal iliac artery, and recent pregnancy (20 days postpartum).

The heart showed all the stigmata of chronic rheumatic disease, with moderate mitral stenosis and slight submarginal adhesions of the arortic leaflets. On the atrial aspect of both mitral leaflets in the region of the anterior commissure were large, friable, grayish-red vegetations, extending from the base to the free margin. There was partial destruction of the leaflets and the vegetative process penetrated the entire substance of the anterior leaflet to its aortic aspect. Microscopically the vegetations were composed of masses of fibrin, necrotic polymorphonuclear leucocytes, and colonies of bacteria. No organization by connective tissue was present at their base.

The uterus was moderately enlarged and soft in consistency. Within its cavity was a moderate amount of friable, granular, grayish-red material, which was adherent to the endometrium. Microscopic sections revealed slight subacute endometritis. No placental tissue was found. In the endometrium and myometrium numerous large dilated sinusoids and venules showed recent thrombosis.

The pelvic veins in both broad ligaments and in the tubo-ovarian region showed extensive thrombosis. Miscroscopically there was acute inflammation of these vessels, and the thrombi consisted of meshes of fibrin and numerous necrotic polymorphonuclear leucocytes.

COMMENT

This is the record of a fulminating streptococcal septicemia complicating an apparently normal labor. Chemotherapy in the form of sulfathiazole and sulfanilamide and numerous blood transfusions were without evident effect.

The portal of entry of the septicemia was in all probability the uterus, even though during life there was apparently no significant uterine inflammation and at autopsy only a slight purulent endometritis was found. It is generally accepted that in some cases of puerperal septicemia the primary inflammation in the uterus may regress or even resolve entirely, while the septicemia persists. The Streptococcus agalactia (Lancefield B), ordinarily non-pathogenic, is not rare in the vagina. In this case it may have penetrated from that site or from the uterus.

The development of acute bacterial endocarditis was suspected clinically because of the change in physical signs with respect to the heart, the occurrence of peripheral embolic phenomena, and the presence of chronic rheumatic heart disease. Anatomically the lesion was limited to the mitral valve and its acute character was established by the lack of organization at the site of attachment of the vegetation to the underlying endocardium.

Acute bacterial endocarditis is not an uncommon complication in puerperal septicemia.

Selected by Dr. Howard T. Karsner from the Clinical-Pathological Conferences at the Institute of Pathology, Western Reserve University and University Hospitals, Cleveland, Ohio, as the fourth in a series of cases to be published under the heading, "Case Record Presenting Clinical Problems."

Mathias and Pietrusky* found seven instances of acute endocarditis among 55 autospy cases of septic abortion. Including the present case there were four instances of acute bacterial endocarditis associated with post-abortive or puerperal septicemia among 30 consecutive cases of acute bacterial endocarditis autopsied at the Institute of Pathology in the past 10 years.

In the present case the bacterial endocarditis was engrafted on a valve the seat of chronic rheumatic disease. The tendency of previously damaged valves to develop superimposed bacterial lesions is well known. A preliminary survey has revealed that in at least 50 per cent of 30 consecutive autopsied cases of acute bacterial endocarditis at the Institute of Pathology, there was healed or chronic valvulitis, probably of rheumatic origin. The percentage of cases of acute bacterial endocarditis complicating puerperal septicemia in hearts with chronic valvular disease has not been determined.

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*Mathias, E., and Pietrusky, F.: Allgemeines and Pathologisch-anatomisches über septische Aborte, Arch f. Gynäk., 118:645, 1923.

Treatment of Hyperthyroidism

Except in special instances, hyperthyroidism should be treated by thyroidectomy. Thyroidectomy is safe, is accompanied by an extremely low morbidity and mortality, and offers the most rapid and effective means of restoring the patient to health and economic usefulness.

Roentgen therapy, although not recommended for use in the treatment of uncomplicated hyperthyroidism, is of value: (1) as an adjunct to surgery used in bad risk cases to prepare the patient for operation (just as ligation of the superior thyroid arteries was formerly used to effect a reduction in the severity of the hyperthyroidism), (2) as a palliative form of treatment in patients who are inoperable because of their advanced age or because of serious complications, (3) in conjunction with iodine in certain carefully selected cases of recurrent or residual hyperthyroidism.

Roentgen therapy is of little value in the treatment of hyperthyroidism associated with large adenomatous goiters. Roentgen therapy is effective in about 50 per cent of the patients with diffuse goiters, inducing a partial remission of symptoms and a significant depression of the basal metabolic rate. In the majority of these cases, however, the tachycardia and often the nervousness persist, and eventually surgery is required. For these reasons, unless strong contraindications are present, surgery offers the most rapid and the most certain means of effecting a cure.—George Crile, Jr., M.D., Cleveland; W. Va. Med. Jour. Vol. 37, No. 6, June, 1941.

Develop a Philosophy: Adapt yourself to social and spiritual surroundings.—Fetterman.

Significance of Precordial Pain

In the cases of coronary sclerosis with pain, it is difficult to say where pure angina pectoris ends and this group begins; or to tell when the individual case in this group will have a sudden coronary occlusion and then fall into category just described. However, in any discussion of precordial pain there is this group of older patients with coronary sclerosis resulting in gradual coronary artery narrowing with increasing degrees of myocardial anoxemia (formerly called chronic myocarditis) which, if recognized and properly regulated, can go on for years in spite of their substernal fulness, dyspnea and precordial discomfort.

The rheumatic heart group gives a different picture. The subgroup of patients with rheumatic mitral disease, with or without fibrillation, complains very little until pressure symptoms manifest themselves as a fullness or vague pain in the region of the third and fourth left interspace. At times there is a tenderness over this area, due to the pressure from the enlarged pulmonary conus of the right ventricle and left auricle. The subgroup of rheumatic aortic insufficiency, although rare, may give a typical picture of angina pectoris, due to lack of filling of the coronary arteries during diastole.

Syphilitic aoritis gives no precordial pain until aneurysm or aortic insufficiency develop. If the aneurysm is saccular, then definite localized pain and tenderness are present overlying the position of the aneurysm. If the aneurysm is cylindrical, then an upper substernal burning or sense of fulness is complained of, but no localized tenderness is found. In syphilitic aortis with aortic insufficiency, again we may find symptom-complex suggesting angina pectoris, due to the lack of filling of the coronary arteries during diastole. Here again the age of the patient the history and the typical murmur aid in the diagnosis.

Dissecting aneurysm is rare, but must be kept in mind. The clinical picture is much like that of an acute coronary occlusion, except that the substernal pain is overshadowed by the very severe pain in the interscapular region and evidence of occult bleeding. Pericarditis may give rise to acute substernal and precordial pain at its onset, no matter what the etiologic factor—rheumatic, tuberculous or cardiac infarction but with the pouring out of an exudate the precordial pain disappears and only when the effusion is sufficiently great to cause a cardiac tamponade does precordial pain reappear, this time as a sense of fulness in the upper substernal area or over the third and fourth left interspaces. In calcified pericarditis this same sense of pressure may appear (in our twelve cases of calcified pericarditis only two made this complaint).—George C. Griffith, M.D., Philadelphia, Pa.: Delaware S. M. Jour., Vol. XIII, No. 7, July, 1941.

Some Early Recollections

CURTISS GINN, M.D.

MY earliest recollections and many of my happiest memories cluster around my father's office of the eighties. It was a small office in a small town. I doubt if it could have mustered much more than a thousand inhabitants, all told. But withall a pleasant little town to live in, with its graveled streets, cobble stone gutters, and the houses sociably snuggled up against one another. The industrial age, had as yet made but little imprint upon it, for the Miami Valley was still a tobacco country and when the farmers brought their years' crop to town, the streets would be jammed with the wagons.

The so-called "front office"—a reception room in present day parlance—was in Summer the coolest and in Winter, the warmest room in the house. It also had distinction for it boasted of a huge hard coal base burner stove, resplendent in its nickel plate glitter and shinging mica windows. It was even ornamental in Summer, though no dull red glow shone through the windows.

Office hours were whenever the Doctor was in although there was rarely any business after eight in the evening, not because of any definite edict but because the townspeople believed in the maxim "Early to bed, early to rise".

But for me the exciting part of the day was to begin. Each evening that I could escape my mother's watchful eye, I slipped into the niche back of the stove, ostensibly to prepare my lessons for the next day. True the light from the ceiling coal oil lamp was poor but so were my lessons. Almost every evening, some of the "Boys in Blue", would drop in to live over again the events of the war between the States. I lived through the battles of Bull Run, Appomatox, the Wilderness and Gettysburg until my excited wigglings caused me to be unceremoniously hauled out of my hiding place and sent to bed. I know now that all the victories of the Union were not won by this little group, but by far and large they were brave and who served their country well and lived up to the code of their times. Peace be to their ashes.

In the little town, there were five regular doctors besides the irregulars, the latter not possessing a diploma. The regulars were, I think, representative of the best of their times, rather impressed as a whole with the importance of their calling. This was indicated to some degree by their dress; a cutaway coat, striped trousers surmounted by a "derby" or at times a soft hat, this last being a concession dictated by the buggy top. The topper and the Prince Albert coat with its voluminous skirts were reserved for special occasions such as the annual church attendance. One of the profession, however, solved the problem for himself by wearing a silk tie with a sack suit and never going to church at all.

The Author

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We had a number of irregulars, including the bone setters, the pow wow women and the old men who could charm various ailments away, but there are two who stand out in my mind—the "Water Doctor" and the "Blacksmith Doctor". At this time there was no medical act for the State of Ohio or if there was, it was not enforced.

The "Water Doctor" had fled from Germany in his youth to escape military service. He was a fine upstanding Saxon with a leonine head of hair and a flowing beard, parted in the middle. His wife also practiced but only when the Doctor was off on one of his numerous hunting and fishing trips which he combined with the gathering of the various local herbs, used in making up the concoctions he prescribed. I do not know about his success hunting herbs but he rarely came home empty handed from the hunt. Because of his peculiar methods of diagnosis, he attained a more than local reputation.

All that was necessary was a freshly voided specimen of urine from the patient, the patient need not appear at all. Shaking and sucussing the while, an opinion was quickly given and the appropriate medicine prescribed. One of the apocryphal tales about him, was that of the woman who had fallen down the kitchen stairs. Her recovery not satisfying her husband, he presented himself with the customary offering. After communing with the specimen for a time, the Doctor announced that the lady in question had fallen down stairs and broken three ribs in the process. But said the husband, Doctor So and So said that she had broken five. "Only three here", said the Doctor, "but did you bring me

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Note—One of a series of Medical Literary essays written at the request of The Editor.

all the sample". No some had been left behind. "Too bad, too bad, the rest of the steps must be in the rest of the sample". He eventually achieved quite some national prominence, not however because of his medical attainments. Late in life, venturing back to Germany for a visit, he was promptly seized and thrown into jail because of his evasion of military service of a quarter of a century before. Since he was a naturalized citizen, the good offices of the United States Government were enlisted in his behalf and after some months of diplomatic sparring, he was released, but he was a man broken by his unfortunate experience.

John B. was a blacksmith and not a very good blacksmith at that. In looks he was the Beau Ideal of the Victorian bar-keeper, with his florid cheeks, roached up hair and tightly curled black mustache. His medical career began by advising the farmers about their sick stock, and having some degree of success, he reasoned that it would be no more difficult to doctor two-legged dumb animals than four, so he hung out a sign and overnight blossomed out into an M.D.

When the medical registration act came into force, this man lacked by a trifle, the necessary ten years in practice, to permit him to continue. He appeared before the appropriate Judge to argue the case. His Honor, not being impressed by the applicant's medical knowledge, asked him whether he had any medical books. The answer was that he had a very good library and as to its size, that it weighed at least 60 pounds. This being a rather novel way of assessing a library, he was ordered to bring it into the court. The following morning, he appeared, a coffee sack over his shoulder and dumped the contents on the courtroom table. Correct. One two-pound copy of Dr. Gunn's Family Medicine and 48 pounds of patent medicine almanacs of many years vintages. The permit for continuance of practice was denied but only for a short time, owing to the intercession of the Congressman from the district.

THE ITINERANT MEDICINE MAN

From early Spring to late Fall, the itinerant medicine man was a feature of the public square. Rarely playing a more than one or two-night stand, they formed an almost uninterrupted succession. Sometimes the spieler would hold forth from a gaily painted caravan, at times only a battered old spring wagon but always under the light of flaming gasoline torches. Since that was the time when the West was still wild, most shows had on the platform, one or two Indians in full regalia, who under prompting, grunted their approval at intervals. The chief performer, a long-haired individual wearing a black sombrerro and sporting a long skirted coat of the same color, would introduce himself as a scout, who had lived among the Indians for years and who for some outstanding accomplishment, usually saving the life of the tribe's medicine man, had been given the marvelous formula for his product. This was a medicine that would infallibly cure all sundry and divers diseases. Usually it was, as I remember, especially good for kidney ailments, the same being a disease that was vaguely suspected by a fair share of the population on general principles as being the cause of most of their aches and pains. Of course there were variations upon this theme, but the patter was highly effective, judging from the stream of dollars and half dollars that were passed up to the platform. I really believe that the amount of monies taken out of the town in the course of a year would have equalled the amount paid the medical profession. For these were the days of small fees. Fifty cents for an office prescription and sometimes less, a dollar for a town call with 25 cents extra, for mileage—one way—for country calls. The standard fee for obstetrics was seven and a half dollars, including two calls after delivery. There were compensations, however, no birth certificates to fill out, no questionnaires nor income tax reports to be made out.

THE SADDLE BAG DOCTOR

The era of the saddle bag doctor had passed at the time of these memories, though one of its survivors still lingered as the withered leaf still clings to its branch in the Autumn, after its fellows have long since fallen. His range had been over many miles and it was related that after one of his visits to a backwoodsman, sick with the typhoid, he rode back into town with the sick man's feather bed tied on behind his saddle, no other fee having been in sight.

Barter payments for the doctor's services were still common in my time—a quarter of beef, a side of pork, butter, chickens, eggs and hay together with personal services being the medium.

The horse, however, was still the only means of local travel, harnessed to a side bar buggy in the Summer and a sleigh in the Winter. For the hard driving necessary in a medical practice, a Morgan roan was supposed to be the best. This strain was reported to have originated from the stock captured or left behind by Morgan's raiders during their foray through southern Ohio in '63. They were gaunt, rangy horses of an off color sorrel and a bad disposition. It was necessary to keep a sharp eye on both ends of the animal but they were tireless and practically indestructible.

As to diseases, typhoid was a constant Summer visitor, as was the "dumb ague" Spring and Fall. Diphtheria was very common with no certain defense and almost every youngster had had scarlet fever at some time in his childhood. Hardly ever was the town without the red flag of smallpox nailed on the corner of some house. It usually had its origin among the rag pickers in the local paper mills. I do not remember of the disease being epidemic nor of any deaths occurring but pockmarked faces were common. We had but few crippled children and I never heard of a case of infantile paralysis.

Nobody took vacations unless for a day's fishing or hunting, except the coal and lumber dealer, who had a rare disease called "Hay Fever".

For amusements, we had churches, lodges and beer saloons but with the population being largely German, it was feasible to enjoy the privileges of all three without attracting much attention. And we had our poor and unfortunate, not that I meant to class them with the amusements, but we took a friendly interest in their troubles, accepted our responsibility and lent a helping hand. I believe that they fared as well under that personal and understanding attention as they do now since they have become a class—one third of the nation—and presided over by well staffed and impersonal social and governmental agencies.

If happiness and contentment are all that can be reasonably expected of life, I doubt, whether in the year 1941, we are any better off than the men and women of the eighties.

The Practice of Obstetrics

I found the practice of obstetrics in my locality mostly in the hands of midwives, of whom there were five who were active. Most of them were unclean and often a menace to their patients. I found one, however, who was clean, kind, and sympathetic. She made no local examinations, used no syringe or douche. "If it comes, I take it—the afterbirth, the same; if it lasts too long or is too hard, I get the doctor," was her saying. I had the most deplorable experience with midwives—not so much in assisting them in deliveries but with infections which followed, for which complications I would be called. These women were ignorant, and, as I have said, unclean. Besides, they were dishonest, took no advice, and were cocky and fearless. They made examination upon examination, digging with their unclean hands in the parturient tract. The poor women they were trying to deliver thought they were helping, even pitied them because they were unable to dig the baby out. They carried syringes with them and douched person after person, even where the syringe had been previously used on an infected patient. One midwife whom I had treated for erysipelas and who had had one childbed death from infection was strongly cautioned by me against the dangers of erysipelas in confinement cases. I admonished her not to go near or have anything to do with confinement work for a long, long time. What was my surprise, on being called to attend a primipara shortly after warning her, to find this midwife in attendance. She boldly met me at the door and informed me that I was too early. "How so?" I asked. She answered, "I examined her. It's too high." I flew into a rage and said, "Why, you dirty woman, how dare you examine my patient? You ought to be put where the dogs won't bite you, and that's over in Waukesha in the 'cooler.'"

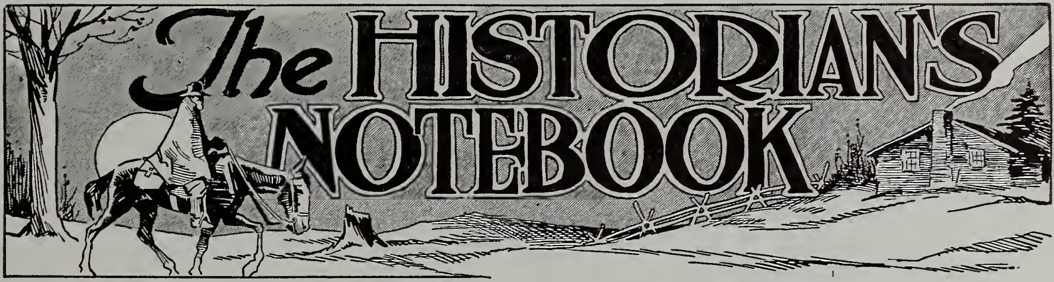
This woman was wearing a turban to conceal some of the scabs (following her recent erysipelatous outbreak) about her temples and above her ears. I told the young husband that there was a poison nest there, and since the midwife had examined his wife I would not examine her, and that if anything happened in this case he would know where to place the blame. My patient's pains ceased and I returned home, only to be recalled the next day. The woman delivered herself quite promptly without my hands touching her locally. Three days later a severe chill and rise of temperature announced an infection. I told the family what I suspected, but the patient's mother sided with the midwife. "Yes, Doctor," she said, "you want to give poor Mrs. B. the blame, but it is your fault. You opened the window and let air in, and you changed the bed linens and her nightdress. That was the cause."

I placed the young woman on the kitchen table and explored the vagina with a speculum. There was a typical vesiculation not an inch and a half inside the vagina on the right. I showed both the husband and the mother this lesion, and informed them that I had recently treated Mrs. B. for that same disease and had warned her to keep away from childbed cases for a long time. Mrs. B. fled! This proved to be a very serious case although the patient finally recovered.

THE HORSE AND BUGGY

My country practice, of course, was done in the days of the horse and buggy. During my 11 years in the country I owned and drove 31 horses. In those days doctors of necessity, drove their horses hard and they were one of their heaviest expenses. The conditions of the roads played a large part in the life of a country practitioner. There were few roads that were well-graveled, but when the roads were bad I always had one mile of fair footing in any direction. The side roads were often terrible from the mud. There just wasn't any bottom in some places! Speed with a good horse varied from seven miles an hour on the best-conditioned roads to two miles on muddy or snow-blocked roads. . . .

Good fortune has been mine in my new location (Milwaukee) for nearly 44 years. On retiring recently, I said, with gratitude, to my many patients and friends, "Had I my life to live over, I would gladly travel again the road I took."—From Reminiscenses of the late Robert G. Sayle, M.D., Milwaukee; Wisconsin M. Jour., Vol. 40, No. 8, August, 1941.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

Materia Medica from Ohio to California

PHILIP D. JORDAN, Ph.D., and I. H. PIERCE, Ph.D.

IN these days when the problem of the high cost of medical care is widely and vigorously discussed, it is interesting to find, in the first medical book published west of the Allegheny Mountains, the following directions for preparing "The Poor Man's Medicine:"

> Boil four ounces of pure Quicksilver in an iron pot, with two quarts of water, until half is evaporated, and bottle the water for use. The same Quicksilver will serve, again and again, as often as you want a supply of the water. This medicine is said to be as simple in taste and as safe in using as so much simple water. . . . The virtues are many: it destroys worms, purifies the blood, opens obstructions, scours the glands.

This contribution to materia medica is from *The Indian Doctor's Dispensatory*, by Peter Smith of the Miami Country, published at Cincinnati in 1813. It is undeniable that it is truly a poor man's medicine; it could be even more economically prepared by omitting the quicksilver and even the boiling, without losing anything in efficacy.

But Peter Smith was a real pioneer in medicine in what was, in his day, the "western country," and his book, of which only three copies are known to exist, gives a clear idea of the drugs employed by the frontier doctor.

Born in Wales and educated at Princeton, Smith acquired his medical knowledge from his father and from the works of Dr. Benjamin Rush, Dr. John Brown, from Culpepper's *Herbal*, and from other authorities of his day. He also obtained much information from physicians whom he met in his wanderings from Pennsylvania to Georgia and west to Ohio. He styles himself "The Indian Doctor" because he employed many vegetable drugs known to the Indians and collected and tested by himself.

Smith put a price of one dollar on his book, admitting that seventy-five cents would be enough for a common book of its size. "But those who do not chuse to allow him 25 cents for his advice, may desist from the purchase." He employs only common names of drugs, but most of them can be identified. There is Culver's Root, Home Ipecacuanha, Nine-bark Root, Black Snake Root, White Pine Bark, and the Devil's Bit, which "has an ill name, but is a good root." He uses some rather quaint expressions in his descriptions. Black Snake Root is a "dissolver of scorbutics," Warner's blood-purging pills, "give the blood a lively circulation . . . but sometimes puke a little," and the Home Ipecacuanha, or Indian physic, "is my great pioneer to clear the way for other medicine."

There is much sound common sense in some of Smith's treatments. For stopping bleeding, he used cold compresses, or alum, or a strong decoction of the tannin-bearing pig-nut hickory bark. For resuscitating persons apparently drowned, he advised wrapping in hot cloths, rubbing, and artificial respiration carried out by a person of "good strong lungs" placing his mouth to the sufferer's and blowing his breath at inter-

The Authors

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- Dr. Pierce is associate professor of pharmacology at the State University of Iowa, and is an active member of the Medical Club at the university.

vals into the lungs of the latter. And his ointment of sulphur and other ingredients for the itch is sound therapy in this day.

But one may reasonably express a doubt that common snails "dissolved in salt" and applied to a cancer cured it in a few days, or that bleeding at the lungs was ever stopped by doses of a teaspoonful of fine salt, or even by Smith's favorite prescription No. 9, agrimoney tea, his great "strengthener of the system." To cure the toothache by sympathy, Smith wrapped some parings of the toe-and finger-nails of the patient, a lock of his hair, and a drop of blood from the gum of the tooth in a paper or rag and hid it in the bank of a creek "at a place where no creature crosses." He said that in fifteen years it had seldom failed and concluded, truthfully, "if you are willing to try this, you may rest assured, it will do you no hurt."

In contrast to this piece of superstition, we find Smith's eye-water, a dilute solution of zinc sulphate and sodium chloride, with a little copper sulphate, a prescription very similar to some of those employed in modern practice.

Altogether the *Indian Doctor's Dispensatory* furnishes a fairly accurate idea of the medical art as it was practiced on the Ohio frontier and elsewhere 120 years ago.

II

Government expeditions, survey parties, and dragoon surgeons offer illuminating commentaries on the types and uses of drugs on the American frontier before the middle of the nineteenth century. An interesting example of the use of a backwoods materia medica is found in the famous Lewis and Clark expedition.

In 1804, one year after the financially embarrassed and politically perplexed Napoleon sold Louisiana to the United States, came the great exploring trek of Lewis and Clark. With three boats, supplies, scientific equipment, and 42 men, the expedition left St. Louis for the trans-Missouri west. It was not to return until September, 1806.

Elaborate plans were made to care for the men's health. President Jefferson wrote to Lewis on June 20, 1803. "Carry with you," he admonished, "some matter of kine-pox, inform those of them with whom you may be of its efficacy as a preservative from the small-pox; and instruct & incourage them in the use of it." Lewis, well acquainted with the use of vaccine, asked Jefferson to send forth fresh "vaxcine matter as I have reason to believe from several experiments made with what I have, that it has lost its virtue."

The party's two medical chests contained a pharmacy of 48 items. All were purchased from the supply house of Gillaspy and Strong. The total cost amounted to $90.69. The list included such well-known drugs as calomel, gum camphor, magnesia, and laudanum, as well as pocket sets of surgical and dental instruments.

Lewis and Clark's Drug List

15 lb.	Pulv. Cort Peru	$30.00
½ lb.	" Jalap	.67
½ lb.	" Rhei (Rhubarb)	1.00
4 oz.	" Ipecacuan	1.25
2 lb.	" Crem. Tart.	.67
2 oz.	Gum Camphor	.40
1 lb.	Gum Assafoetid	1.00
½ lb.	" Opu Turk. Opt.	2.50
¼ lb.	" Tragacanth	.37
6 lb.	Sal Glauber	.60
2 lb.	Sal Nitri	.67
2 lb.	" Copperas	.10
1 oz.	Tartar Emetic	.10
6 oz.	Sacchar. Saturn. opt.	.37
4 oz.	Calomel	.75
4 oz.	Vitriol Alb.	.12
½ lb.	Columbo Rad.	1.00
¼ lb.	Elix. Vitriol	.25
¼ lb.	Ess. Menth. pip.	.50
2 cz.	Magnesia	.20
4 oz.	Laudanum	.50
2 lb.	Ung. Basilic Flav.	1.00
¼ lb.	Bals Copaibae	.37
¼ lb.	" Traumat.	.50
1 lb.	Ung. e lap Calimin	.50
1 lb.	" Epispastic	1.00
1 lb.	" Mercuriale	1.25
1	Emplast, Diach. S.	.50
1	set Pocket Insts. Small	9.50
1	" Teeth Insts. Small	2.25
1	Clyster Syringe	2.75
4	Penis do	1.00
3	Best Lancets	2.40
1	Tourniquet	3.50
2 oz.	Patent Lint	.25
50 doz.	Billious Pills to order of B. Rush	5.00
6	Tin Canisters	1.50
3	1-oz. Stopd. Bottles	1.20
5	4-oz. Tinctures do	1.85
6	4-oz. Salt M.	2.22
1	Walnut Chest	4.50
1	Pine do	1.20
	Porterage	.30
¼ lb.	Indian Ink	1.50
2 oz.	Gum Elastic	.37
2 oz.	Nutmegs	.75
2 oz.	Cloves	.31
2 oz.	Cinnamon	.20
	Total	$90.69

While most of the drugs in the list are familiar to any pharmacist, a few may require further identification.

Gum Opu Turk. Opt. is	Best Turkish Gum Opium
Sacchar. Saturn.	Sugar of Lead
Vitriol Alb.	Zinc Sulphate
Elix. Vitriol	Probably Aromatic Sulphuric Acid
Bals. Traumat.	Compound Tincture of Benzoin
Ung. Basilic Flav.	Some form of Resin Cerate
Ung. e lap Calimin	Calamine Ointment
Ung. Epispastic	Some form of rubefacient or blistering ointment
Billious Pills to order of B. Rush	Pills made according to the prescription of Dr. Benjamin Rush of Philadelphia. The active ingredients were probably calomel and jalap.

This pharmacopia, however, was to be used sparingly. Whenever feasible, Lewis and Clark relied upon such vegetable drugs as could be gathered and prepared along the route. Hardly had the expedition got under way when several men broke out with boils, and others came down with "deassintary."

The established treatment for boils, bites, or superficial wounds seems to have been either a poultice prepared from the root of the tobacco plant, or a lotion made from the yellow root *(hydrastis canadensis)*. Specific directions were recorded by Lewis for making the latter.

First, the root was cleaned, washed, and dried. Then it was broken up with the fingers and put in a glass vessel, "taking care to fill it about two-thirds with the broken root." Rain or river water was added to fill. The bottle was shaken frequently and, after six hours, was ready for use. It was then dispensed as an eye wash, for a mouth water, and as "an excellent outward application in cases of wounds or local application of any kind."

When Joseph Field, one of the party, became ill with "disintary," Captain Clark prescribed 30 drops of laudanum. This sedative was frequently dispensed for "histerical" cases. Thirty drops seems to have been a standard dose, and is more than is commonly used today. Pleurisy patients were subjected to the classical technique of bloodletting and then were given "those remedies common to that disorder." An Indian child was treated with Dr. Benjamin Rush's bilious pills. The son of a guide was running a high fever and also was suffering from a swollen neck and throat. This lad was treated internally with sulphur and cream of tartar, and a poultice of wild onion applied to the neck. Within a week, his cure was reported complete. Wild ginger or cow root were sometimes powdered and used as poultices. Cream of tartar and sulphur were generally prescribed for "gripeing and rhumatic" afflictions, apparently being used as a laxative. Abscesses, one of which discharged a half pint, were opened with a scalpel and roughly bandaged.

Members of the expedition were almost constantly troubled with "soar" eyes, probably caused by intense prairie heat as well as by dust. This conjunctivitis was treated with a solution of white vitriol and sugar of lead in the proportion of two grains of the former and one of the latter to each ounce of water. Indians were dosed with the following eye preparation: "1 G of ELA v V & 2 grs. of Sacch.^{m} S^{try} to an ounce of water and in that proportion." It is interesting to note that while the ingredients of this prescription are the same as used in that for the whites, their proportions are reversed. "ELA v V." is a crude abbreviation of Vitriol of calamine and "Sacch.^{m} S^{try}" is, of course, Saccharum Saturni.

An Indian squaw who complained of pain in the lower region of the abdomen was treated by a carefully recorded procedure. "I found," Lewis wrote, "that two dozes of barks and opium . . . produced an alteration in her pulse for the better . . . I now gave her broken dozes of diluted nitre until it produced perspiration and at 10 P. M. 30 drops of laudnum which gave her a tolerable night's rest."

A favorite prescription for liniment called for spirit of wine, camphor, castile soap, and a little laudanum. *Lues venerea* was attacked with mercury, as well as with a decoction, based upon an Indian formula of lobelia and sumac.

The use of decoctions and infusions was general among both settlers and Indians. Prescriptions called for practically every root or leaf indigenous to a particular region. The frontier physician used what he found.

Lewis, taken sick while in an Indian camp on June 11, 1805, treated himself.

> I was taken with such violent pain in the intestens that I was unable to partake of the feast of marrowbones. Having brought no medicine with me I resolved to try an experiment with some simples; and the choke cherry . . . first struck my attention; I directed a parsel of the small twigs to be gathered striped of their leaves, cut into pieces of about 2 inches in length and boiled in water until a strong decoction of an astringent bitter taste was produced; at sunset I took a pint of this decoction and about an hour after repeated the doze. By 10 in the evening I was entirely relieved from pain and in fact every symptom of the disorder forsook me.

III

An interesting use of Tr. Opii on the frontier is referred to in the journal of John Long, an interpreter and trader among the Indians in the St. Lawrence region in the later years of the eighteenth century. A band of none-too-friendly Indians came into John's camp and their chief, a rather belligerent individual, demanded whiskey.

"I gave the chief of the band," wrote Long, "the liquor, and a single bottle of rum . . . in which I had infused a considerable quantity of laudanum.—The chief immediately took a hearty draught which soon stupified and lulled him into a profound sleep, in which I was afterward informed, he remained twelve hours, depriving him of the power of doing harm, and that soon after, an Indian who had an antipathy against him and only sought an opportunity of gratifying his resentment, tomahawked him." This disastrous, though indirect, result of the use of opium seems rather unique in the history of the drug.

Andre Michaux, a French botanist and espionage agent, traveling through Ohio, Kentucky, and Tennessee in 1795, writes: "A Frenchman who traded among the Cheroquis Savages cured himself of the Itch by drinking for ten days a decoction of Chips of that tree which he called Copalm and which is the true Liquidambar *(Gleditsia triacanthos)* or sweet locust." He also mentions Spiraea trifoliata as "a purgative used by the Savages and by the Illinois French." The root of Fagara, he says is a powerful remedy for disease of the spleen, and while he apparently never tried it, he has "no doubt but that the root of Zanthoxylum clava-Herculi (prickly ash) can be used for obstruction of the liver and spleen.

Francois Andre Michaux, son of Andre, found measles very prevalent among the settlers and advised them to use, instead of the whiskey which they were drinking to excite perspiration, a decoction of the leaves of the viscous elm, with the addition of a spoonful of vinegar to a pint, and an ounce of sugar of maple. The abbreviations, "Michx." and "Michx.f.," appended to the scientific names of many American plants, indicate the activity of the father and son in early botanical exploration.

Naturally, plants possessing purgative or emetic properties would, by the visible evidence of their potency, impress the observer most forcibly. So we find a large number of these mentioned by early travelers.

Thaddeus M. Harris, in 1803, writing from near Pittsburgh, after admiring the beautiful white flowers of the Blood-root, mentions the emetic qualities of the root. And Peter Smith is eloquent in praise of the "Indian physic," the scurvy-grass Root, a "special good purge," the Butternut bark, the Ninebark root, and the China Rhubarb root, which arouses his particular admiration as it "will vomit and purge both."

Fortescue Cuming, an Englishman, visited Ohio in 1807-1809. He recommends for fever and ague "a plentiful use of calomel occasionally, and a strong decoction of Peruvian bark, snake root and ginsing." He carried a bottle of spirits of turpentine in his pocket with which to wet his stockings to prevent catching cold. On Cuming's falling into the water, his host recommended Pennsylvania whiskey as an antidote against the effects of the ducking, and was surprised, and no doubt disgusted to see his guest use it as an external application!

John Bradbury traveled in the region west of St. Louis in 1809-1811. He refers to the prevalence of ague and the various remedies for it. He said that "every one who visits or sees those affected has a favorite remedy, all differing from each other." But, he continued, the physicians treat it with bark (cinchona) and laudanum, and recommended that the emigrant should lay in a supply of these drugs.

When Maximilian, Prince of Wied, visited Indiana in 1832-1833, he noted the use of many native drugs. Remedies for the bite of the rattlesnake particularly interested him, and he mentioned snake root *(aristolochia serpentaria)* and "above all the Lion's heart *(Prenanthese rubicunda)*" which is recommended as "a sovereign remedy against the bites of serpents." Tea, made of the bark of the white ash, he also reported as "an infallible cure for rattlesnake bite." He noted, growing about Harmony, Indiana, ginsing, the "spurious Colombo" and peppermint, and he described the slippery elm poultice. He found the Indians using balsam and tallow in treating wounds.

In 1803, Maximilian suffered an attack of what "a negro from St. Louis" diagnosed as scurvy, and recommended a diet of the green herbs of the prairie, "especially the small white allium reticulatum (wild onion)." The Prince followed this regimen and recovered in a few days. Here is perhaps an anticipation of the modern use of Vitamin C.

Opium, in the form of laudanum, was freely used by early travelers in the west. Major Long, in 1819, mentioned the treatment of "an alarming attack of a spasmodic affection of the stomach" with opium and whiskey. An interesting case of idiosyncrasy toward opium is described by James O. Pattie who traveled from St. Louis to the Pacific and back through Mexico. While lost in the desert and suffering from thirst, one of the party, in despair, drank the contents of a bottle of laudanum, hoping to find relief from his sufferings in death. But, to his surprise, he experienced a marked exhilaration and annoyed his companions by describing, at great length, how well he felt.

An English farmer, W. Faux, who visited in Charleston, South Carolina, in 1819, mentioned the abundance in the woods of "Ching Sang" and ipecac, said that the dogwood bark was as efficient in malaria as the Peruvian, and that sassafras tea was in general use for two or three months in the spring.

Faux had an attack of "something like bilious fever" and found relief in two grains of calomel and a warm bath. But he gives part of the credit for the cure to "drinking less toddy and punch, which, in this country, are certainly bilious."

Castor oil was apparently not in common use on the frontier. An exception, however, is found in the case of John B. Wyeth, who traveled to Oregon in 1832, and was attacked by yellow fever in New Orleans. A French doctor gave him castor oil, four wine-glasses of it in one day, which he assured him would "scare away" the fever. John wrote, "Its operation was not one way, but every way. I thought I should have no insides left to go home with." But he survived the medicine, as well as the fever, and recommended the former in doses of four ounces, made as hot as could be swallowed and repeated in eight hours.

While cinchona bark appeared in the medicine chest of nearly every early traveler, John K. Townsend, who crossed the Rockies to the Columbia in 1833-1834, seems to have been among the first to use quinine sulphate for treatment of intermittent fevers. Since the alkaloid had been first isolated only thirteen years before, this indicates a very rapid spread of the use of the active principle in place of the bark itself.

A New Guide for Emigrants to the West, written by J. M. Peck in 1836, listed the principal diseases of the region. In the winter, severe colds, inflammation of the lungs and pleurisies, with acute inflammation of the brain and inflammatory rheumatism not uncommon. In the summer, cholera infantum, diarrhoea, cholera morbus, dysentery and intermittent fevers as "ague, chill and fever and dumb ague." Sore eyes were common. Peck's standard treatment seemed to be 15 to 20 grains of calomel, followed by castor oil or salts. These evacuants were followed up by a tonic of Peruvian bark or quinine.

Some very sound advice was given by Joseph E. Ware in *The Emigrants Guide to California*, published in 1849. "To every one who designs crossing the mountains we would earnestly say, avoid large quantities of medicines, pills, calomel, etc.—cleanliness and frequent bathings are your best preventatives of sickness." And the simplicity of pioneer drug therapy is evidenced in this quotation from Henry Villard's *The Past and Present of the Pike's Peak Gold Regions*, published in 1860. "A little blue mass, quinine, opium and some cathartic medicines, put up in doses for adults is considered sufficient for the medicine chest."

The modern urge to "alkalize," so blatantly exploited by radio and newspaper advertising, was perhaps foreshadowed by David Thomas, who traveled in Indiana 120 years ago. He said, "Of alkaline medicines, perhaps pear lash *potassium carbonate is the best.* Its good effect in *cholera morbus*, diarrhoea, etc., have been often experienced; and it is always an excellent preventive. It sweetens the stomach and promotes digestion."

In conclusion, a rather amusing extract from the letters of Francis Chardon, a well-known trader in the upper Mississippi in 1837, shows a laudable spirit of investigation as well as a practical knowledge of Indian psychology. Chardon describes, with pardonable pride, his treatment of a sick Indian.

"I have turned Out," he wrote, "to be a first rate doctor. St. Grado, an Indian that has been bleeding at the Nose all day, I gave him a decoction of all sorts of ingredients Mixed together, enough to Kill a Buffalo Bull of the largest size, and stopped the effusion of Blood, the decoction of Medicine, Was a little Magnesia, peppermint, sugar lead, all Mixed together in a phial, filled with Indian grog—I done it out of experiment And Am Content to say, that it proved effectual, the Confidence that an Indian has in the Medicine of the Whites, is half the Cure."

Aleukemic Leukemia

Not since Hirschfeld's studies has the occurrence of aleukemic leukemia posed as a problem to the systematist in its relation to leukemic leukemia, for they are recognized as being fundamentally the same disease. The phases of leukemia can be summarized in this way: Leukemia usually has a leukocyte count over 50,000, often over 100,000, and occasionally as high as 1,000,000 (open or leukemic). Any type of leukemia can present a phase in which the white cell count is not above normal limit of 12,000. When, in addition, immature cells do not appear in the blood smear, then the disease can unquestionably be characterized specifically as "aleukemic." When immature white cells are found in the smear in significant numbers, then the state can be called "subleukemic" as is suggested by Forkner and by Osgood. These aleukemic phases are most frequently encountered at the onset of the acute form of the disease; they may persist for a long time, even throughout the entirety of the case, or be only temporary, which is more usual. They can also occur during the natural course of the disease, or as a result of treatment (roentgen, benzol, transfusions).

Despite any future change in the exact meaning of these terms, they will remain in some form because of their clinical significance. Open leukemia, when met with, is easily placed in a clinical pigeonhole. Aleukemic and subleukemic cases are as a group distinctly difficult to diagnose with rapidity and accuracy. Retention of these names has a pedagogic advantage, for they keep the concept for which they stand in the mind of the clinician and laboratory worker.

After all, whether a case is diagnosed as aleukemic, subleukemic, or simply leukemic depends in a great degree on the length of time the case can be observed. Many cases, first seen in the aleukemic or subleukemic phase, will ultimately be diagnosable as leukemia from study of the peripheral blood. With this in mind, and considering that clinical diagnosis is the important reason for recognizing the aleukemic phases, we feel that it is permissible to use aleukemic leukemia in a generic sense to embrace all of these manifestations.—H. Russell Fisher, M.D., Philadelphia; The Penna. M. Jour., Vol. 44, No. 11, August, 1941.

The health of the people is really the foundation upon which all their happiness and all their powers as a state depend.—Disraeli.

Dust swept under the sofa disturbs no one—until it is discovered, nor does tuberculosis hidden from public view.

Industrial Commission Disbursed $2,795,522.82 For Medical Services in 1940; Annual Report of Actuary Is Reviewed

ACCORDING to a recent report of E. I. Evans, chief actuary, the State Industrial Commission during 1940 disbursed $2,795,522.82 for medical services, (including a small amount for dental services); $1,157,274.49 for hospital care and nursing; $134,495.04 for funerals, and $77,270.30 for court costs, a total of $4,164,562.65. This amount was in addition to death awards and compensation to injured employees. This figure includes payments covering injuries to private and public employees, as well as occupational disease claims.

Comparative figures for 1939 follow: $2,612,378.38 for medical service; $1,136,968.97 for hospital care and nursing; $109,665.92 for funerals, and $117,996.79 for court costs, a total of $3,977,010.06.

NEW RECORD ANTICIPATED

The number of claims filed during 1940 was 212,033, compared with 183,080 in 1939; 255,094 in 1929—the peak year; and 130,099 in 1932. Indications are that the number of claims filed in 1941 will establish a record, as there were 126,593 filed during the first six months, and the number is increasing from month to month.

"Medical only" claims, involving payment for physician's services but no compensation for loss of time by the claimant, numbered 164,782 during 1940, or 77.7 per cent of all claims filed, compared with 77.6 per cent in 1939. Average expense of "medical only" claims decreased from $8.37 in 1939 to $8.30 in 1940.

BASIC RATE LOWERED

Because of a favorable experience during 1940, the Industrial Commission was able to establish a smaller basic premium rate for this year, effective July 1, 1941.

Mr. Evans' analysis of the status of the state insurance fund and experiences for 1940 reads in part as follows:

"The Ohio State Insurance Fund has experienced another favorable year during 1940, (Table 1) which has made it possible to again reduce the general level of workmen's compensation rates. The rate reduction was possible notwithstanding the fact that the recent General Assembly made substantial increases in claim benefits. It is estimated, based on activity similar to 1940, that the rate reduction will result in $580,000 lower premium cost to employers for the next year.

"The favorable factors associated with the acceleration of industrial activity have had a greater tendency to lower loss ratios than have the accompanying unfavorable factors. Over-time and increased wage levels resulting in increased payrolls and premiums, and greater opportunities for the return to employment of injured claimants resulting in lower claim cost, tend to reduce loss ratios. High pressure production, changes in operations, and new working environments tend to increase accidents.

ASSETS, LIABILITIES, SURPLUS

"The surplus of the Fund during 1940 increased $741,158.11 causing the surplus at the close of the year to reach $4,554,019.33. The statutory surplus decreased from $3,362,267.22 to $3,102,971.68. This decrease of $259,295.54 was due to the heavy catastrophe losses resulting from two mine disasters during 1940, with 73 fatalities at Willow Grove and 31 at Nelms, which resulted in claim awards of $625,000 for the 104 deaths. Ten years had transpired since 1930 when a major mine catastrophe occurred in Ohio.

"The total assets for the year increased from $64,061,538.61 to $70,726,547.28, an increase of $6,665,008.67. An addition of $5,765,427.04 was made in the amount of reserve set aside for future payment of benefits on claims occurring prior to 1941. Thus the claim reserves increased from $52,675,366.09 to $58,440,793.13. The increased assets and claim reserves result from a larger number of employers insured as well as more extensive activity of all employers.

"The five year comparison of the premium income and losses (Table 2) discloses the marked increase for the year 1940 over 1938 and 1939, but still below the year 1937. While the premium increased $1,910,774, the losses incurred increased $3,449,580, the premium increasing 12 per cent over 1939 while losses increased 22 per cent. After giving effect to the investment earnings of the Fund to meet claim loss obligations the per cent of losses to premium was 96.5, thus leaving 3.5 per cent of the premium in excess of net incurred losses to apply toward surplus and to provide for the expense of $143,935 for maintenance of the Division of Safety and Hygiene. The general expense of administration of the Fund is not paid from premiums but is provided out of the General Revenue Fund of the State.

COSTS OF CLAIMS

"The average cost of accident claims, including compensation for wage loss as well as various medical, funeral and court costs, decreased 3 per cent during 1940. Compensation cost decreased 3 per cent while the cost of medical and other benefits decreased 4 per cent.

"Average benefit cost of claims, when compared with 1930, shows a decrease in total benefit cost of 5 per cent in the past 10 years. The 1940

(Continued on page 878)

TABLE 1

OHIO STATE INSURANCE FUND

(Workmen's Compensation)

FINANCIAL STATEMENT AS OF DECEMBER 31, 1940

*PRIVATE FUND

Assets

BONDS AT AMORTIZED VALUES			$58,564,097.94
State Treasurer's Bond Balance	$60,286,342.09		
*Less Public Fund	3,716,755.42		
Par Value of bonds		$56,569,586.67	
Amortized value over par		1,994,511.27	
All bonds are in the custody of the State Treasurer and consist of obligations of the Federal Government and Ohio taxing districts.			
CASH IN BANKS			8,717,358.98
Certificates of deposit drawing interest	$ 1,543,816.53		
Checking account without interest	7,746,293.52		
State Treasurer's Balance		$ 9,290,110.05	
*Less Public Fund		572,751.07	
All deposits are in Ohio banks and are protected by depository bonds held by the State Treasurer.			
PREMIUMS IN COURSE OF COLLECTION			2,841,462.84
No premiums more than 60 days old are included.			
INTEREST ACCRUED			603,627.52
TOTAL ASSETS			$70,726,547.28

*The Ohio State Insurance Fund is separated by statute into two funds. The Private Fund covers employers in private industry, while the Public Fund covers the State, municipalities and other taxing districts.

Liabilities

RESERVE FOR COMPENSATION AND MEDICAL BENEFITS	$58,440,793.13
To cover future payments on claims where the inception of the injury or disease was prior to January 1, 1941. Compensation and other benefits extend over periods of time and, in some cases, during the remainder of the life of a claimant.	
OUTSTANDING WARRANTS	219,173.14
Warrants issued for claim benefits which had not been presented for payment to the State Treasurer by December 31, 1940.	
UNEARNED PREMIUM	4,409,590.00
Advance premium paid for coverage beyond December 31, 1940.	
STATUTORY SURPLUS	3,102,971.68
To provide for catastrophic losses and other statutory contingencies. (No reinsurance is carried to cover catastrophe hazard.)	
SURPLUS	4,554,019.33
To provide for general industrial trends and non-statutory contingencies.	
TOTAL LIABILITIES AND SURPLUS	$70,726,547.28

TABLE 2

COMPARATIVE INCOME, LOSSES AND EXPENSE

Year	Earned Premium	Losses Incurred	Minus Investment Earnings	Net Losses Incurred	% of Losses to Premium	Expense
1936	$16,691,107	$16,873,869	$1,621,641	$15,252,228	91.4	$131,003
1937	20,531,783	21,350,784	1,336,726	20,014,058	97.5	147,863
1938	15,004,859	15,861,386	1,762,301	14,099,085	94.0	145,130
1939	16,214,045	15,930,752	1,929,504	14,001,248	86.4	138,747
1940	18,124,819	19,380,332	1,881,310	17,499,022	96.5	143,935

compensation cost was 2 per cent lower than 1930, while the medical and other fee cost was 13 per cent lower.

"The cost of occupational disease claims continues to show a substantial increase during the year, this increase being particularly pronounced in the dust diseases. The revised occupational disease rates indicate the industries in which disease claim cost is prominent and in which employers must give attention to the disease hazards.

RECENT AMENDMENTS TO LAW

"The 94th General Assembly enacted a number of amendments, effective September 4, 1941, pertaining to premium rates and claim benefits as follows:

"Provision for establishing minimum premiums for different classifications as a minimum amount for which coverage would be provided, regardless of payroll amount.

"Occupational disease rates to vary by degree of hazard for industries, with a minimum rate of at least two cents, and further providing for individual employer merit rating on disease experience after January 1, 1942.

"Classification rates to be made in accordance with the latest five calendar year experience.

"Elective agreement by employer and employee as to application of Ohio law where there is possibility of conflict with laws of other states due to contract of employment having been entered into and all or some portion of the work performed in different states.

"Claim benefits increased:—Weekly maximum from $18.75 to $21.00; Death maximum from $6,500 to $7,000; Temporary total maximum from $3,700 to $4,200; Partial disability maximum from $4,000 to $6,000 in special cases; Living maintenance $10.00 per week during rehabilitation training, not in excess of 26 weeks.

MINIMUM PREMIUMS ESTABLISHED

"Minimum premiums have been established and will be applicable to all renewals, reinstatements and new coverage on and after September 4, 1941. The minimum premiums vary from $5.00 to $193.00 by degree of hazard as indicated by the basic rate of each classification. The minimum premium is equivalent to $5.00 plus 7½ times the basic rate.

"Where the payroll at appropriate rates produces a premium lower than the minimum premium for the highest rated classification applicable to the employer, the minimum premium shall apply for a six month period. Provision is made for partial minimum premiums for portions of a six month period, but in no event will coverage be provided for any portion of a six month period at a premium lower than $5.00.

"The inclusion of silicosis and other diseases has so increased the claim obligations that the two cent flat occupational disease rate was producing inadequate premiums. In order to increase the disease premiums and also to provide an incentive for disease prevention in industries where disease hazard is prevalent, the law was amended to provide for a general disease rate of at least two cents for all classifications and in addition higher disease rates in these classifications where the disease hazard is prominent. Therefore occupational disease rates have been established varying from a minimum of two cents in classifications with little or no indicated disease hazard to fifty cents where exceptionally high disease costs have developed.

SUMMARY OF RATE REVISION

"The annual revision of premium rates carries a reduction in the general level of 3.2 per cent. This revision is effective on and after July 1, 1941, on all semi-annual renewals, reinstatements or new business.

"The reduction is applicable to those classifications where the accident and disease claim cost experience for the last five calendar years developed a favorable trend, while those classifications that have developed a higher cost indication than the former rate have received rate increases. In a number of classifications there was not sufficient change in the claim loss experience to warrant a change in rate other than the two cent reduction which results from including a two cent occupational disease rate in the basic rate. Heretofore the two cent disease rate was not included in the basic rate, but was carried as a separate additional charge. The result of the revision is as follows:

	Number	Percent
Rates increased	155	40.4
Rates unchanged	2	.5
Rates decreased in excess of $.02	90	23.4
Rates decreased $.02	137	35.7
	384	100.0

Mr. Evans' report contained some interesting figures on the operations of the department since its inauguration on March 1, 1912. From that time until December 31, 1940, the department has collected premiums amounting to $327,014,384; collected interest totaling $44,928,976; disbursed benefits amounting to $300,462,053; handled 4,626,012 claims; and insured at some period or continuously over the 29 years, 149,281 employers. The following table shows the increase in the business of the department during recent years:

Year	Employers Insured	Claims Filed	Total Assets
1933	42,824	131,145	$40,167,624
1935	44,664	162,510	45,927,983
1937	50,058	237,125	57,933,054
1939	51,861	183,180	67,856,966
1940	61,490	212,033	75,099,482

Operation of Trial Plan of Providing Selectees With Single Medical Examination Extended to 10 Additional Counties

On page 796 of the August, 1941, issue of *The Journal* there appeared an article relating to the experimental plan of State Selective Service Headquarters of having selectees examined only once prior to induction by a traveling board of army and civilian physicians in lieu of local medical examinations by physicians serving various local draft boards.

This plan was operated on a trial basis during July in 19 Northwestern Ohio counties. The plan operated so successfully that it has been extended to 10 Northeastern Ohio counties. Since August 10, examinations under the old plan (examinations by examining physicians attached to local draft boards) have been suspended and selectees of the counties in that area have been examined at the Central Armory, Cleveland, by the Examining-Induction Board, comprised of army and civilian physicians, which has been functioning there for sometime as an induction medical examination board.

COUNTIES COVERED

The counties covered by the extension of this experimental plan are: Ashland, Lorain, Medina, Cuyahoga, Summit, Portage, Geauga, Lake, Ashtabula and Trumbull.

A bulletin issued on August 1 to local boards and examining physicians in the 10 counties, tersely described the plan placed in operation as follows:

"Pursuant to a request of National Headquarters, Selective Service System, and a letter from the Adjutant General of the Army to the Fifth Corps Headquarters, and in conformity with Par. 617, Amendment No. 49, Vol. VI, May 9, 1941, an alternative plan of physical examination has been prepared known as the 'Ohio Plan' and extended trial authorized.

PURPOSE DESCRIBED

"The purpose of this plan is based on an effort to prevent some of the difficulties and inequalities encountered under the present plan of examination, particularly involving the rejection of men at the Induction Station after they have left their homes and business expecting to be inducted into the Service. In addition the plan proposes to allow an interval between this final type of examination and Induction, during which time the Inductee will have time to close his affairs and make preparation for Induction.

"The plan, approved by National Headquarters, Selective Service System, and the Adjutant General of the Army, has been in operation in the Toledo Induction Area during July, and will be extended to the Cleveland Induction Area beginning August 18, 1941. The counties primarily included will be as as follows: Ashland, Lorain, Medina, Cuyahoga, Summit, Portage, Geauga, Lake, Ashtabula and Trumbull. The examinations will be conducted at the Central Armory, Cleveland, Ohio, by the Examining-Induction Board now functioning at the Armory.

TYPE OF EXAMINATION

"The examination at this time, under the working of this plan, will be a final type examination following which the registrant will return to his home, and if classified in I-A, I-AO or IV-E by the local board, he may proceed with his plans on the basis of the knowledge that he will be accepted for Induction when so ordered. It should be understood by the local boards and examining physicians that this examination will be operated as a trial method and final adoption of this plan or extension thereof will depend on evidence of its desirability after sufficient trial. The very excellent and effective cooperation of examining physicians to local boards is herewith acknowledeged and their appointment as such will continue to remain active.

"It is requested that they continue to function in an advisory capacity to the respective local boards although not required to make general physical examinations (except occasional special cases) pending the tryout of this plan, in other words, they may for the time being, consider this a vacation period.

"On and after August 10th, and until further notice, examinations, under present plan by local examining physicians, in counties named will be suspended."

Academy of Ophthalmology and Otolaryngology To Meet Oct. 19-23

The forty-sixth annual meeting of the American Academy of Ophthalmology and Otolaryngology will be held at the Palmer House, Chicago, October 19-23.

The academy's program consists of one general scientific meeting on the morning of the first day, separate programs for the two specialties on alternate afternoons and instructional courses every morning beginning on Tuesday.

The feature of this year's general opening meeting will be a symposium on vertigo, with Dr. Francis H. Adler, Philadelphia, representing ophthalmology; Dr. William J. McNally, Montreal, otolaryngology; and Dr. Bernard Alpers, Philadelphia, neurology.

There will be various meetings of small groups, including the "Teachers' Section", secretaries of local eye, ear, nose and throat societies and alumni organizations. The meeting of the teachers' section will be concerned especially with the role of the Academy in national defense. There will be a scientific exhibit and alternating with the scientific programs of the specialties each afternoon will be an elaborate motion picture program.

Do You Know - - -

Dr. Charles C. Higgins, Cleveland, was re-elected secretary of the American Association of Genito-Urinary Surgeons.

* * *

The death rate from appendicitis among industrial policyholders of the Metropolitan Life Insurance Company dropped from 14.4 per 100,000 in 1929 to 8.9 in 1940.

* * *

Information on a new identification tag recently adopted by the Navy for officers and enlisted men will include the man's blood group and the date he received tetanus toxoid.

* * *

As of July 1, 1941, there were 7,015,177 persons enrolled in nonprofit hospital service plans in the United States, a gain of 36 per cent in 12 months. The total for Ohio was 890,523.

* * *

In 1940, of the 209,127 claims filed with the State Industrial Commission, 40,772 were for eye injuries, or 19.5 per cent, which was the same percentage as in 1926 when there were 220,785 injury and occupational disease claims filed, of which 43,038 were for eye injuries.

* * *

Dr. John B. C. Eckstorm, Columbus, has been appointed chief of the medical staff at the Ohio Penitentiary, succeeding Dr. George W. Keil, transferred to the Ohio Soldiers' and Sailors' Home, Sandusky. Dr. Morris Goldberg, Cincinnati, is the new resident physician at the Penitentiary.

* * *

A School of Nutrition is being established at Cornell University. It will offer a two-year course to students who have completed three years of college work, leading to a degree of master of science in nutrition.

* * *

According to the *Statistical Bulletin* of the Metropolitan Life Insurance Company, more than 18,000 persons a year commit suicide in this country, and probably an additional 100,000 make unsuccessful attempts to kill themselves. A larger number of women than men attempt suicide, but men outnumber women by more than three to one for successful efforts.

* * *

The recent distribution by The National Foundation for Infantile Paralysis of new grants totaling $195,030 included a grant of $5,300 to the Cleveland City Hospital for the continuation of a study of infantile paralysis in experimental animals after the disease has been produced by way of the gastrointestinal tract, and studies of various other aspects of the disease.

Governor Cooper of Tennessee vetoed a basic science bill passed by the House and Senate of that state. His excuse was that the bill sought to eliminate competition for the medical profession.

* * *

Guest speakers on the program of the 76th Annual Meeting of the Michigan State Medical Society at Grand Rapids, September 17-19, include: Dr. Samuel Iglauer, Cincinnati; Dr. Bernard H. Nichols, Cleveland; Dr. C. A. Doan, Columbus.

* * *

Lieutenant-Commander Drew L. Davies, Columbus, who was medical officer aboard the U. S. S. Wilmette, at Chicago, has been appointed procurement officer for midshipmen for the U.S. Naval Reserves, with offices in the Federal Building, Columbus.

* * *

The Office of Civilian Defense recently appointed a medical board to devise uniform procedure for protection of civilians in an emergency. Members are: Dr. Elliott C. Cutler, Boston; Dr. George Baehr, New York; Dr. Oliver B. Kiel, Wichita Falls, Texas, and Dr. Albert S. McCown, Washington, D. C.

* * *

The 1942 Annual Session of the American Medical Association to be held at Atlantic City, June 8-12, has been designated as the Pan-American Session. South and Central American and Canadian medical societies will be asked to send special representatives.

* * *

The next examination of the American Board of Obstetrics and Gynecology will be held in various cities of the United States and Canada on Saturday, January 3, 1942. Physicians interested may secure additional information by addressing Dr. Paul Titus, secretary, 1015 Highland Bldg., Pittsburgh, Pa.

* * *

Albert Edwin Sidwell, Jr., Ph.D., chemist in the Chemical Laboratory of the American Medical Association since 1938, has been Director of the Laboratory. A graduate of Brown University, Dr. Sidwell has made contributions to the chemical literature in photoelectric spectrophotometry, chemistry of hemoglobin, etc. The Chemical Laboratory is a unit of the Division of Drugs, Foods and Physical Therapy of the A.M.A.

* * *

In the case of a claimant suffering from compensable silicosis, who developed a hernia from coughing, the State Industrial Commission recently held that the hernia should also be recognized as compensable.

Medical Licenses Granted to 239 Who Passed Examinations at Meeting of the State Medical Board on July 22

LICENSES to practice medicine and surgery in Ohio were granted 239 medical school graduates, who passed the June examinations, at a meeting of the State Medical Board in Columbus, July 22. Certificates were granted 1 midwife, 23 osteopaths, 5 chiropractors, 11 mechano therapists, 5 cosmetic therapists, 19 masseurs and 11 chiropodists. The certificate issued to the midwife was the first granted in this classification since January, 1931.

Dr. Herman K. Hellerstein, Cleveland Heights, a graduate of Western Reserve University School of Medicine, made the highest grade—89.9 per cent—in the medical and surgical examinations. Second place was won by Dr. Richard L. Everhart, Columbus, a graduate of Ohio State University College of Medicine, with 88.4 per cent. Another graduate of Western Reserve, Dr. Howard A. Hughes, Cleveland, was third, with 88.1 per cent.

Those granted licenses to practice medicine and surgery after having passed the June examinations were:

OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

Francis W. Anderson, Ray; Edward Barr, Dayton; Morris L. Battles, Cleveland; Ernest E. Breyfogle, Akron; Bernard J. Brief, Columbus; Russell N. Brown, Centerville; Darrell C. Caudill, Middletown; Ivan T. Clark, Columbus; Romeo A. DeMarco, Conneaut; Lowell O. Dillon, Lima; William J. East, Toledo; Kathryn E. Buell, Columbus; Joseph Eiser, Toledo; Abigail S. C. Englender, Cincinnati; Robert H. English, New Philadelphia; Richard L. Everhart, Columbus; Harold I. Farber, Cleveland; Robert J. Ferguson, Ashland; Jerome Fisher, Columbus; Frederick M. Flickinger, Toledo; Jerome S. Frankel, Cleveland; Roger M. Gove, Mechanicsburg; David H. Greegor, Columbus; Donald L. Greenamyer, Alliance; Joseph J. Groom, Lakewood; Robert C. Harsh, Columbus; Nathan E. Headley, Columbus; Jasper M. Hedges, Ashville; Jane M. Hoopes, Marysville; David W. Jones, Columbus; Harry J. Keys, Jr., Columbus; Elmer R. King, West Liberty; Jack D. Knapp, Lore City; Ervin L. Koons, Clyde; Gordon R. Ley, Middle Point; Mack S. Lopusniak, Martins Ferry; Charles R. Lyons, Ansonia; Robert H. Magnuson, Columbus; William J. Martin, Fremont; Albert M. Mogg, Youngstown; Marion T. Moreland, Columbus; James M. Muckley, Akron; William G. Myers, Columbus; Clyde W. Norman, Springfield; Munroe W. Palestrant, Columbus; John T. Read, Columbus; Robert E. Reiheld, Loudonville; Franklin D. Rodabaugh, Williamstown; Marvin H. Roszmann, Cincinnati; Harold T. Sargis, Cleveland; Frederick L. Schellhase, Youngstown; Howard J. Scott, Cambridge; Gerhard T. Shearer, Columbus; Robert M. Sherman, Cincinnati; Saul C. Sigelman, Lakewood; John A. Smith, Columbus; David W. Sprague, Cleveland; John T. Stage, Marietta; George G. Stein, Jr., Cleveland Heights; John M. Strait, Jr., Columbus; James Thomas, Jr., Columbus; Harold K. Treece, Arlington; Harry P. Ulicny, Salem; Charles S. Vinson, Portsmouth; Kenneth J. Wharram, Springfield; Chester P. Widmeyer, Akron; Charles R. Yoder, West Liberty.

UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE

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OTHER SCHOOLS

Columbia University—George L. Hawkins, Jr., Cleveland; John M. Walker, Dayton. Hahnemann Medical College—Ernest J. Benko, Youngstown; Domenic J. Pontarelli, Ravenna. Harvard Medical School—Richard S. Cosby, Cleveland; Oral H. Stone, Toledo. Howard University—John F. Hume, Cleveland. Jefferson Medical College—Edward W. Browne, Greenville; William E. Goodman, Warren; Andrew G. Lasichak, Youngstown; Harrie M. Quackenbos, Barberton; Robert W. Wolford, Mansfield. Loyola University—Stanley J. Matuszewski, Cleveland. New York University—LeRoy J. Hyman, Cleveland. Northwestern University—William B. Ayres, Dayton; John D. Dickie, Toledo; Harold Newman, Akron; Charles L. Rickerd, Columbus. Oklahoma University—Irene F. Anderson, Massillon. Rush Medical College—John J. Sherman, Ironton; John F. Stotler, Youngstown. University of Chicago—Norris L. Brookens, Cincinnati. University of Rochester—Richard C. Forman, Rochester (N.Y.); Myron B. Franks, Cleveland; Charles R. Sias, Athens. Woman's Medical College of Pennsylvania—Margaret C. Richey, Willoughby. Yale University—Walter C. Beery, Lima. McGill University—Harry N. Roback, Cuyahoga Falls. University of Western Ontario—Jack D. Mossman, Toledo. Anderson College, Glasgow, Scotland—David K. Levin, Toledo; Allen P. Newman, Toledo. University of Berlin, Berlin, Germany—Hans F. J. Cohn, Flushing (N.Y.); William J. Rosenzweig, New York City. University of Giessen, Hessia, Germany—Leopold Simon, New York City. University of Heidelberg, Heidelberg, Germany—Jakob Goldmann, New York City; Albert M. Weilbauer, New York City. University of Koenigsberg, Koenigsberg, Germany—Willy Wolffheim, New York City. University of Lyon, Lyon, France—Solomon Alkalay, New York City. University of Munich, Munich, Germany—Sigmund Federlein, Cincinnati. University of Vienna, Vienna, Austria—George Deutsch, Cleveland; Hedwig Lang Donath, Columbus; Robert Lenz, Jersey City (N.J.).

Licenses to practice medicine and surgery were also granted Steven R. DeMeter, Michael J. Hitchko, Michael J. Krisko and David P. Roberto, all of Cleveland and graduates of Loyola University who passed the December, 1940, examinations; and Conrad Rusin, Lorain, also a graduate of Loyola, who was successful in the June, 1940, examinations.

LICENSED THROUGH RECIPROCITY

The Board also granted the following licenses to practice medicine and surgery through reciprocity with other states:

Harry R. Boffman, Cincinnati, Meharry Medical College; Harold H. Brueckner, Lima, University of Michigan; Everett C. Burgess, Wooster, University of Wisconsin; Lloyd F. Catron, Akron, Rush Medical College; Virgil L. Chambers, Proctorville, University of Louisville; Eleanor P. Cheydleur, Youngstown, University of Wisconsin; Michael Crofoot, Cincinnati, Harvard Medical School; David T. Curtis, Toledo, University of Illinois; Arnold V. Gold, Mogadore, University of Louisville; Frances K. Harding, Worthington, College of Medical Evangelists; Warren G. Harding, II, Worthington, College of Medical Evangelists; Arthur M. Harrison, Toledo, Yale Medical School; Ralph M. Hartwell, Columbus, Louisiana State University Medical Center; Guenter E. Heinrich, Columbus, University of Chicago; Artemus B. Henningsen, Cincinnati, State University of Iowa; Frederic L. Hewes, Cleveland, Tufts College Medical School.

Garland M. Johnson, Cleveland, Boston University; Samuel Katz, Dayton, St. Louis University; Michael C. Kolczun, Lorain, Louisiana State University Medical Center; Henry Luidens, Cleveland, Rush Medical College; Elmer E. E. McClelland, Jr., Bellaire, University of Nebraska; Lawrence H. Miller, Newark, University of Pennsylvania; William J. Neal, Archbold, Temple Medical School; Charles K. Neher, Cleveland, University of Chicago; William A. Nosik, Cleveland, University of Wisconsin; Barnie M. Reagan, Parma, University of Tennessee; Simon W. Reichard, Dayton, Medico-Chirurgical College; Samuel S. Reinglass, Canton, University of Illinois; Adolph B. Schneider, Jr., Cleveland, Harvard Medical School; Kenneth McLane Smith, Columbus, University of Chicago; Kenneth Milton Smith, Newark, Jefferson Medical College; Eleanor L. Steindorf, Cleveland, Washington University; Henry A. Teloh, Toledo, University of Buffalo; William R. Tepe, Norwood, St. Louis University; Ronald W. Thompson, Akron, University of Nebraska; Benjamin R. Van Zwaluwenburg, Toledo, University of Michigan; John A. Williams, Cincinnati, Creighton University.

Hildebrant Is Named Secretary of State Industrial Commission

Richard H. Hildebrant, Wilmington attorney and representative of Clinton County in the State Legislature, has been appointed secretary of the State Industrial Commission. He was named by the Commission to succeed Don W. Wiper, Columbus, recently appointed by Governor Bricker to the Board of Review of the Bureau of Unemployment Compensation. A son of the late Charles Q. Hildebrant, secretary of state in 1915-16, Mr. Hildebrant was formerly assistant U. S. District Attorney at Columbus. At the recent session of the legislature he was a member of three committees of the House of Representatives—Judiciary, Health and Elections.

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Some Suggestions About the Premarital Examination Law

There are always rough spots in the administrative procedure established to make a new law effective. These have to be ironed out and eliminated as experience is accumulated and a better understanding is developed among those directly affected by the statute. This is the case with respect to the new Ohio law requiring all applicants for a marriage license to undergo a physical examination and blood test for syphilis.

Since August 13 when the new Ohio premarriage examination law actually became effective, a number of questions have arisen in connection with the procedure which should be followed. Part of the responsibility for administration of this law is vested in the State Department of Health. An excellent job of planning has been done by State Director of Health Markwith. He is making efforts to keep the procedure as simple as possible, to minimize paper work on the part of examining physicians, and to work out kinks which may develop as promptly as possible.

A lengthy explanation of the new law and the administrative procedure, paper work, etc., was published on pages 784 to 788, inclusive, of *The Ohio State Medical Journal.* Readers of *The Journal* should refer to that article for detailed information on this subject. Nevertheless, the following data and suggestions are offered in an attempt to clarify some of the provisions about which questions have been asked, and for the sake of emphasis:

1. A list of approved serological laboratories to which physicians may send blood specimens of applicants for a marriage license has been established by the State Department of Health in accordance with the law. The names of these approved laboratories have been sent to county medical society secretaries, probate courts and local health commissioners. Revised lists will be sent to them from time to time. Physicians can obtain information regarding laboratories permitted to make examinations under the premarriage examination statute from such sources. The original list of approved laboratories was published in the article appearing in the August issue of *The Journal*, already referred to, and a revised list will be found elsewhere in this issue of *The Journal.* Subsequent revised lists will be published in *The Journal* as they are issued.

2. Each approved laboratory has been furnished with a supply of premarital examination blanks which must be filled out by the physician who examines an applicant. This procedure was followed to expedite distribution and minimize expense. There is no reason for the physician to have one of these blanks until the laboratory has made a blood examination as the physician's part of the blank cannot be executed by him until he has the laboratory report. A combination blank containing a place for the laboratory statement and a place for the physician's statement has been devised.

3. When a physician sends a blood specimen to a laboratory he should indicate to the laboratory whether or not the person from whom the blood was taken is an applicant for a marriage license. If the person from whom the blood was taken is a marriage license applicant, the laboratory will send to the physician with a report of the laboratory findings one of the regulation premarital examination blanks, referred to above. If the blood analysis is to be made for a patient other than an applicant for a marriage license, the physician should so indicate, in which case the laboratory will report to him in the customary manner. This suggestion should be followed carefully as it will eliminate confusion and delay.

In an article on this law published in the August issue of The Journal it was stated that the laboratory will send to a physician a regulation premarriage examination blank only in event the laboratory finding is negative. This was a mis-statement. A blank will be sent to the physician by the laboratory regardless of the laboratory finding. This means that the responsibility for determining whether or not the applicant whose blood was tested does or does not have syphilis and whether or not an applicant so infected is in a stage of the disease which is communicable or likely to become communicable rests on the examining physician. In other words, the examining physician should analyze carefully both his clinical findings and the laboratory report, basing his decision as to whether he should or should not sign the regulation examination certificate on the diagnosis arrived at. The clinical examination is important as it will serve as a check on the laboratory finding. At the same time, the laboratory report must be studied carefully by the physician, especially in cases where the laboratory finding is positive and it becomes necessary for the physician to determine whether or not the disease is in a communicable stage.

4. The law makes no reference as to a physician's fee for making the premarital examination. This is a question for the physician to decide as he does in ordinary private practice. Some

individuals have expressed concern that some applicants will be unable to afford the cost of the physician's examination. Assuming that the charges will be moderate and based on the economic status of the individual, there is little, if any, basis for alarm. In fact, those who cannot afford a nominal fee for the physical examination probably are not sound financial risks from the standpoint of marriage and should delay matrimony until their economic condition improves.

5. The law expects the applicant to pay for the laboratory test. However, it does provide that the test shall be made without charge by the State Department of Health Laboratory upon receipt of a certificate from the examining physician that the applicant is unable to pay for the laboratory test. The State Laboratory will not accept or test a premarital blood specimen unless it is accompanied by a certificate signed by the physician who submits the blood specimen, reading in effect as follows: "I hereby certify that (name of applicant and address) whose specimen of blood I have submitted for a premarital serological blood test for syphilis is unable to pay for such test." It is intended that private approved laboratories be used and that applicants pay for laboratory services except in unusual cases. Physicians are urged to observe this provision carefully and to bear in mind that the law provides a penalty for any person "who shall misrepresent any of the facts prescribed by this act".

6. Reciprocity between Ohio and other states having a law requiring applicants for a marriage license to submit to a blood test is provided for in the law. An applicant who is a resident of another state of this category need only present a certificate from a marriage license official of that state showing that the applicant could have obtained a marriage license under the premarital examination law of that state. If the applicant is a resident of a state which does not have a premarital examination law he must comply with the provisions of the Ohio law by submitting to a physical examination and laboratory test in Ohio.

As already stated, operation of the new Ohio premarital examination law may hit a few snags until the procedure is fully understood and has become more or less routine. That is one reason physicians and others directly concerned should be especially careful and try to carry out all the instructions regarding proper procedure. If the provisions of the law and the regulations are followed and abuses minimized, few complications and little confusion will arise. Eventually the workings of this law will become as routine as the filing of birth and death certificates. Now is the crucial period for the new statute so physicians are urged to cooperate in every possible way with the various administrative agencies.

New Plan of Examining Selectees May Solve Several Problems

Early in July, State Selective Service Headquarters inaugurated on an experimental basis a new plan for conducting physical examinations of prospective draftees. An article describing the plan in detail was published on page 796 of the August issue of *The Journal.* Briefly, it provides that selectees shall be examined by a permanent army board augmented by civilian physicians instead of being examined initially by local physicians attached to local draft boards and later by army physicians at induction centers. In other words, the selectee is given but one physical examination and if he passes that examination he is scheduled for induction without further examination.

This plan was started in 19 Northwestern Ohio counties. According to State Selective Service officials it has operated successfully. During August the plan was given a trial in 10 Northeast Ohio counties. If it continues to operate successfully, it probably will be extended to all sections of the state, although no definite decision on that matter has been made by Selective Service Headquarters.

It appears as if Ohio's Selective Service officials have found a solution for several troublesome problems which have been developing in the Selective Service System.

In the first place, the new plan removes some of the problems which have confronted selectees. Under the original plan of conducting examinations, a selectee after passing the physical examination given by a local physician serving as examiner for a local draft board is ordered to report shortly thereafter to an induction station. At the induction station he is given another physical examination by a board of physicians, consisting mostly of army physicians. This latter medical board is the final judge and jury. In some instances it has rejected selectees who had previously passed the initial physical examination. Obviously, this has resulted in inconvenience and embarrassment to the rejected selectee, and even financial hardship, especially where the selectee has given up employment, believing that he was headed directly for active military duty. Under the experimental plan, a selectee will know that when he is ordered to an induction station there will be no hitches in the arrangements and he can make definite plans for severing his connections with civilian life without much fear of having such plans disrupted at the induction station.

Secondly, the trial plan probably will expedite work at induction centers and will eliminate those with early tuberculosis as all men will be given an X-ray chest examination.

In the third place, the new plan, if and when it is made a permanent arrangement, will free civilian physicians from a large amount of work which they have been doing gratuitiously under the national defense program.

When the Selective Service System was started in the Fall of 1940, the medical profession of Ohio responded promptly and loyally. No difficulty in securing physicians to work with local draft boards was encountered. Obviously, there has been some turnover in the personnel of examining physicians but hundreds of physicians have continuously assumed this responsibility as a patriotic obligation and have been giving efficient and faithful service. This has been the case despite the fact that it has constituted a real hardship on many of the medical examiners, especially in communities where medical and health programs of various types have been initiated, demanding so much of the time and services of physicians that they have been hard pressed to meet the needs of their private patients.

Those who have observed the working of the Selective Service System have realized for some time that the original plan of conducting the physical examinations of selectees is not satisfactory for a long-range, indefinite program. It was the best arrangement which could be made at the time the Selective Service System began operations. In general it has worked out satisfactorily. Nevertheless, it was felt by informed officials that it could not be continued indefinitely, especially in the absence of actual hostilities, because of administrative problems and because of the large amount of work it added to the daily routine of the average physician-examiner.

The new plan appears to be an improvement over the original procedure and more feasible for a long-range military program. There is reason to believe that the national defense program will not be an undertaking of short duration. Therefore, planning must be along more permanent lines.

It should be understood that the medical profession is not grumbling. It has not asked for a change in the examination procedure. It can be said with confidence that the profession will continue to give Selective Service Headquarters 100 per cent cooperation regardless of the procedure used. In event of war the profession will gladly make additional sacrifices. We are sure that physicians now serving as medical examiners for local draft boards will assist the new medical examining boards if necessary. We know that all physicians will volunteer to serve in some capacity in event of war. However, under present conditions and since the emergency remains at a point short of war, we believe that Selective Service Headquarters has been wise in attempting to work out an examination plan which will solve some of the problems which have been discussed.

For the sake of emphasis we repeat that the new plan at this time is simply an experiment. It is being applied to a portion of the state on a trial-and-error basis. It will not be placed into operation in all counties immediately. The Selective Service Headquarters is counting on the cooperation of local examiners in counties outside the experimental areas. Eventually the new plan may be extended to all counties. On the other hand these are days of uncertainty. Plans now in operation and contemplated may have to be altered over night in the light of new events and developments. Together with other groups playing a prominent part in the national defense program, the medical profession must be alert and be ready to adjust itself quickly to new responsibilities and obligations.

Snap Conclusions on Statistical Data Often Misleading

In these columns it has been repeatedly pointed out that often cold statistics are unreliable and should not be used too liberally as a basis for definite conclusions. Whether one agrees with this or not, he must admit that frequently statistical data is confusing. Here are some recent examples to support both of these contentions.

Articles in the daily press have stated that based on statistics assembled by the national Selective Service Headquarters and the Public Health Service, about 43 per cent of those examined under the Selective Service Law have been rejected as unfit for general military service, including 28 per cent who are unfit for any military service, because of physical or mental disabilities.

On the heels of this announcement there appeared many fantastic statements regarding the desperate state of health of the nation and naturally those who want a general program of tax-supported medical care established were not slow to capitalize on this statistical data.

On July 23, the *Washington News Letter on Social Legislation* commented on a national analysis of facts obtained about the physical condition of about 10,000 NYA youths under the recently inaugurated NYA health program. Using data obtained through physical examinations, the report showed that 78 per cent of the youths are fit for any type of work; 13 per cent have defects not thought to be amenable to correction but which are not severely handicapping; 5.5 per cent require medical supervision on the job or at least should only be assigned to work approved by a physician, and 2.5 per cent are temporarily or permanently unfit for any employment.

These conflicting figures demonstrate the fallacy of drawing snap conclusions from cold numbers. National health is a vital factor in national defense. However, we feel that in the final analysis a nation which can list a large percentage of its youth as physically able to engage in productive labor cannot be tagged as a weakling in national defense. In the end a basic motive of an individual is, or should be, to keep himself fit for gainful occupation; not for military activities.

If the nation's health is to be judged on the basis of statistics, the figure probably is some place between the Selective Service figure of 43 per cent and the NYA figure of 2.5 per cent. Doubtless the standards and requirements used by Selective Service and the War Department are exceptionally severe. On the other hand, there is a possibility that the standards used by the NYA are too liberal. Each set of figures may be misleading. In making deductions from the statistics, the purposes underlying the physical examinations given Selective Service registrants and NYA youths must be evaluated.

We have no quarrel with those who are urging a rehabilitation program for those rejected under the Selective Service Law. Follow-up work is needed. Remedial activities should be carried on. But, we are interested in seeing that such activities are carried on properly and we do object to the use of statistical data as a basis for misleading propaganda and weird conclusions. Careful use of statistical data for the purpose of evaluating the health needs of the public is a commendable undertaking. Use of such data for political expediency and for the purpose of misleading the people is not.

Two Appointments Made on the Merit Basis

One of the toughest and most responsible positions in the state government is that of secretary to the State Industrial Commission. Only those with exceptional qualifications are capable of handling efficiently the mass of details and administrative duties which revolve around that office.

For the past year and a half that office has been handled in an efficient and faithful manner by Don W. Wiper. Recently, Mr. Wiper was appointed by Governor Bricker as a member of the Board of Review, Bureau of Unemployment Compensation. Those who have dealt with Mr. Wiper, including representatives of the Ohio State Medical Association, are pleased at the promotion which he has received and are confident he will make an equally good record in his new position. His fine cooperation with the State Association during his association with the Industrial Commission is deeply appreciated by the medical profession.

Richard H. Hildebrant, Wilmington attorney and representative from Clinton County in the 94th Ohio General Assembly, has been appointed to succeed Mr. Wiper. Mr. Hildebrant possesses the qualifications for that difficult job. The Commission is to be congratulated on having selected as Mr. Wiper's successor one who is capable of keeping the efficiency of that office at par.

Mr. Hildebrant can count on the active cooperation of the State Medical Association on matters involving medical phases of the administration of the Workmen's Compensation Act. His record in public office shows that he has a sound attitude on medical and health questions and that he sought the advice of responsible members of the medical profession on legislative proposals pertaining to public health. We are sure that he will realize that the medical problems with which the Commission is confronted from time to time can best be solved around the conference table. That is the policy which the Commission has pursued over a period of years. It has kept the relationship between the Commission and the medical profession in general on a friendly basis and for that reason should be continued.

Get Ready Now for the Big Tax Shock Scheduled for 1942

Those who take the responsibility for providing "In Our Opinion" with material each month are anything but tax experts. Also, providing physicians with advice on taxes and taxation may not be within the scope of a medical journal. Nevertheless, this journal is interested in economic developments in so far as they affect members of the medical profession, collectively or individually. Taxes and taxation are very much a part of the field of economics. Physicians as a group are substantial taxpayers.

Therefore, we're going to make an attempt to present a composite digest of predictions made by various observers regarding the taxation picture so far as the Federal Government is concerned.

The 1941 revenue act applying to this year will be enacted about October 1 and will levy in the neighborhood of $4,000,000,000 in new taxes.

Many persons not affected by the Federal Income Tax now will have to pay one in 1942. This will be accomplished by lowering exemptions for single and married persons, perhaps to $800 and $1,500 respectively.

Those now paying an income tax will have to pay considerably more in 1942. The tax the average individual may have to pay next year may be five or six times what he paid this year. Lowering of exemptions and hiking of tax rates will be responsible. The normal tax rate may be left at 4 per cent but the surtax schedule may be revised to apply to the first dollar of taxable income. The starting rate may be 7 or 8 per cent with corresponding increases in the rates in the higher income brackets.

On top of income taxes, individuals will have to foot the bill for new excise taxes on a long list of commodities and increased taxes on articles now being taxed. Just what items will or will not be taxed and what the rates will be cannot be predicted at this time. The only safe prediction is that there will be excise taxes galore in 1942 and succeeding years.

Hikes in estate and gift taxes will be voted as well as increases in corporation taxes.

In other words, my dear doctor, get ready to shell out in abundance to Uncle Sam next year and during succeeding years. Wise will be the physician who begins to prepare now for the shock. Discuss finances with your patients. Don't let patients get too far behind with their payments. Send statements regularly. Appraise your office procedure to see where you can save, avoid unnecessary expenses and eliminate waste. Your personal expenditures should be analyzed. Don't cut foolishly but reduce where it doesn't hurt too much. Do it now for Uncle Sam is going to nick you plenty next year if the present outlook materializes. In 1943, the situation may be worse.

Some Nursing and Hospital Problems Which Need Consideration

"At one time during the past month the shortage of nurses became so acute that admission to some hospitals had to be restricted to patients requiring emergency operations. This condition brings to light a serious new problem, one of far-reaching importance to the general public, to patients, and to doctors and nurses in particular."

The foregoing appeared as the lead of an editorial published in the August issue of *The Cleveland Academy of Medicine Bulletin*, which continues in part by asking the following questions:

"Is it true that too few young women are going into the profession of nursing? Is the work not sufficiently attractive, are the requirements for admission too high, the period of training too long, or the subsequent financial awards proving inadequate?"

If the situation referred to above existed in Cleveland there is reason to believe that a similar situation existed, or still exists, in other parts of the state. Incidentally, the situation with respect to hospital accommodations has become acute in some cities, due primarily to the more general use of hospital beds through hospitalization plans.

The casual observer may wonder why the medical profession should be particularly concerned about these conditions, suggesting that the medical profession has enough problems to solve without venturing into allied fields. True, the medical profession has its own problems but the practice of medicine is so closely associated with the practice of nursing and hospitalization that the problems of those fields are also the problems of the medical profession.

The hospitalization situation mentioned can be controlled to some extent by careful planning and selection on the part of individual physicians. Hospitals are maintained for those who actually need hospital services. They are not intended to be rest homes and convalescent resorts. The physician should not encourage the use of them for these purposes and, moreover, he should not use them simply for convenience in seeing patients in lieu of home and office visits. Shortsighted policies like these may deprive some person desperately in need of hospital care of adequate service. Likewise, hospital administrators should not lose sight of the real purpose of a hospital in their desire to keep occupancy at a capacity figure.

The nursing problem also is one which should be considered jointly by responsible representatives of the medical and nursing professions and of the hospitals. Especially it is a challenge to the new State Nurses' Examining and Licensing Board, created by legislation enacted by the 94th Ohio General Assembly and which will begin to function on January 1, 1942. That board will have much to say about the educational qualifications of nurses, periods of training, where recognized training may be obtained, who shall or shall not be licensed, etc. Problems in the nursing field, including that of supply and demand, should be carefully considered by the new board in connection with its official duties and in the promulgation of rule and regulations.

The medical profession stands ready to assist the nurses with their problems some of which are of vital public concern. It believes these situations can be met without sacrifice of desirable standards which have been established in the nursing field if a sound approach is made and level-headed leadership within the nursing profession is maintained.

Druggists' Society To Be Commended for Radio Programs

Twice a day during the two weeks of September 15 through 28, the hundreds of thousands of listeners to radio station WLW, Cincinnati, will hear a simple, straightforward message advising them that physical examinations by the family physician will put all members of the family in a better position to face the coming winter. These announcements will be part of a series of daily institutional broadcasts sponsored by the Ohio State Pharmaceutical Association and its brother druggists' organizations in four neighboring states.

"Harsh winter will be here shortly," the announcer will say, "and your friendly druggist suggests that your family have a physical check-up by your physician to make sure that they are prepared for its rigors!"

Probably every Ohio physician has at some time damned the gross claims made for nostrums and panaceas in the flagrantly exaggerated "commercials" of popular radio programs. It should, then, be particularly gratifying to learn that this constructive type of institutional broadcasting is being brought to radio listeners under the auspices of the pharmacist's state association.

At other times in the series the druggists will pay their respects to the dentists and the veterinarians, and it is not improbable that, if the programs continue over a long enough period, there will be other tributes to the family physician. Radio time is a costly commodity, and this spirit of unselfishness on the part of the druggists' organization is to be commended.

Medical Research Must Be Afforded Vigorous Protection

Fortunately Ohio has not been troubled with the activities of those fanatics whose creed is to attempt to prevent the use of animals for scientific experimentation—antivivisectionists. In some states those who place a greater value on the life of a dog then they do on human life have constantly sought to intefere with the activities of medical scientists. Nevertheless, Ohio should not consider itself immune. There have been several recent indications that an antivivisection crusade may be staged in this state, making alertness on the part of those engaged in the protection and preservation of the health of the people of Ohio necessary.

At the regular session of the Ohio General Assembly held earlier this year, a mild attempt was made by antivivisectionists to handicap medical research in Ohio. Two proposals loaded with antivivisection theory were introduced. The legislator who introduced them promptly had them buried when acquainted with their intent and purpose. Incidentally, this is an example of the risks which a legislator runs when bills are not read and understood prior to their introduction.

During the past month the Headquarters Office of the State Medical Association was visited by a general assignment reporter for the *Pittsburgh Sun-Telegraph*, a Hearst-owned newspaper. This reporter stated that his assignment was to obtain clippings or photostats of recent articles, editorials and news items from medical journals in Ohio and Pennsylvania on vivisection, animal experimentation, medical research, etc. Certain Hearst-owned publications some time ago started an attack on animal experimentation, just why no one seems to know, so apparently the Pittsburgh reporter's mission was based on something other than a casual interest in this subject and probably had no constructive purpose.

During the latter part of July letters and literature bearing the signature of the Cleveland Antivivisection Society, Inc., were mailed to individuals in various parts of the state, soliciting memberships in local antivivisection societies and financial support, and attacking the use of animals in medical research.

There appears to be something in the wind. Therefore, medical societies and other groups in Ohio which are actively concerned in protecting medical research from fanatical attack must be prepared to meet any outbreak which may occur. If and when any situation should arise any place in Ohio wherein there develops a clash between those engaged in medical research and those opposed to animal experimentation, we sincerely hope that the press of that community will have the courage to line up on the side of science and human suffering by commenting editorially in a manner similar to the following editorial which appeared recently in the *Chicago Tribune*:

> "The most astonishing thing about the self-styled antivivisectionists is their pertinacity in a cause that is as thoroughly discredited as it is bad. They have not imposed their particular brand of insanity on a civilized community in years, yet they keep coming up for more.
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> "Their most recent incursion has been at Peoria. The members of the city council, most of whom, by the law of averages, must have some member of their families who is alive today only because of medical progress through animal experimentation, have been subjected to the usual fictions regarding the horrors to be found in medical laboratories.
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> "A recent dispatch noted that Dr. Anton J. Carlson had landed, and no doubt he has the situation in hand by now. The Peoria affair may safely be left to the doughty doctor and the good sense of the town's own people. It is a pity, however, that men like Dr. Carlson must, from time to time, drop their work against death and human misery to refute once again the time-frayed arguments of ignorance and perverted sentimentality.
>
> "Vivisection is an intentionally misleading word. The majority of experimental animals are not subjected to surgery. Those that are are almost invariably placed under a local or general anesthetic and are painlessly destroyed thereafter—the same fate experimental dogs would meet if they were left in the pounds from which medical laboratories obtain them.
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> "Every medical or other scientific laboratory has the strictest rules, rigidly enforced, to prevent abuse of or cruelty to experimental animals. As scientists have frequently pointed out, the ordinary operations of husbandry, performed without anesthesia, subject animals to more pain in any single day than they have suffered in a century of laboratory experimentation.
>
> "The horrors that the antivivisectionists portray in experimental laboratories simply do not exist. But since they insist on following this theme of cruelty and agony, here are a few truthful instances—and they could be multiplied literally by millions—to which these people might give some attention.
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> "Perhaps they would like to watch a golden

haired child of 5 starve to death within a few months, in spite of the most tender care by parents and physicians. That was the almost inevitable fate of child diabetics until the discovery of insulin two decades ago. Insulin was discovered through experiments on dogs. The hundreds of thousands of diabetics whom it enables to lead normal lives are able to take it with safety only because doses are regularly standardized by experiments on other animals.

"Or perhaps they would rather see the trapped agony in the eyes of the father of a family who had just been told that he had Addison's disease, an incurable malady that led to death in a short time. Addison's disease is no longer necessarily fatal. It is controlled by cortin, a drug found by experiments on dogs.

"Or these self-styled apostles of gentleness might take their stand beside the parents who watch a child stricken with infantile paralysis, not knowing whether the disease will leave the child crippled in mind or body. The convalescent serum that has greatly reduced the fatality and crippling effects of this disease was developed by animal experimentation, which is being continued in the hope of finding a complete cure.

"Perhaps they would like to watch the progress of a shambling hulk with a mind arrested in childhood by meningitis. This is one of the many diseases cured by the "miracle drugs" sulfanilamide and its chemical allies. The world would not have them if it had not been for animal experimentation.

"Most people have seen a copy of Sir Luke Fildes' famous painting 'The Doctor.' It shows Queen Victoria's own physician sitting hopelessly by in a humble cottage as a little girl chokes her life away with diphtheria. Such scenes were a commonplace in the childhood of the present generation of adults. They are rare today because of the antitoxin and the toxoid immunizing agents prepared in the bodies of horses and tested on other experimental animals.

"The horrors of cancer need no elaboration. The search for the agents that cause it depends largely on the use of experimental animals. If the antivivisectionists had their way, that curse would remain on mankind forever.

"The list can be extended almost indefinitely. The prevention of smallpox, yellow fever, typhus and lockjaw, the treatment of pneumonia, syphilis, scarlet fever, anemia, bubonic plague, gallbladder ailments and gastric ulcer, new technics in surgery, the whole range of vitamins and hormones, the marvelous anesthetic ethylene—all these and many other medical discoveries owe their debt to animal experimentation.

"If the antivivisectionists are not moved by human suffering, perhaps they would rather watch a shivering, half paralyzed dog that has been stricken by distemper. The vaccines and serums that are 99 per cent effective in preventing or curing distemper were obtained by experiments on dogs. Pasteur experimented on dogs to develop the vaccine that saves both them and men from otherwise certain death from rabies. Experiments on dogs developed tetrachlorethylene as a cure for the hookworm that formerly killed so many pets. It has since been found useful in treating hookworm in humans.

"Where does the cruelty lie—in the scientists who humanely use animals to end human suffering, or with the people who by stopping animal experimentation would deny humanity an indispensable weapon against the scourges that still beset it?"

Coming Meetings

Ohio State Medical Association, Columbus, April 28-30, 1942.

American Medical Association, Atlantic City, June 8-12, 1942.

American Association of Obstetricians, Gynecologists and Abdominal Surgeons, Hot Springs, Va., Sept. 11-13.

American Association of Railway Surgeons, Chicago, Sept. 8-10.

American Clinical and Climatological Association, Skytop, Pa., Oct. 16-18.

American College of Physicians, St. Paul, April 20-24, 1942.

American College of Surgeons, Boston, Nov. 3-7.

American Congress of Physical Therapy, Washington, D. C., Sept. 1-5.

American Hospital Association, Atlantic City, Sept. 15-19.

American Public Health Association, Atlantic City, Oct. 14-17.

American Roentgen Ray Society, Cincinnati, Sept. 23-26.

Association of American Medical Colleges, Richmond, Va., Oct. 27-29.

Interstate Postgraduate Medical Assembly, Minneapolis, October 13-18.

National Society for the Prevention of Blindness, New York City, Dec. 4-6.

Southern Medical Association, St. Louis, November 10-13.

Society of American Bacteriologists, Baltimore, Dec. 29-31.

Recently Married

Recent marriages of Ohio physicians include the following: Miss Virginia Berry and Dr. W. R. Agricola, Newcomerstown; Miss Mary Katherine Klipfel and Capt. Frederick P. Berlin, Wapakoneta; Miss Ruby Plummer and Major Samuel L. Bossard, Gallipolis; Dr. Edith Charlotte Shrader, San Francisco, California, and Dr. William L. Gilmore, East Liverpool; Miss Elizabeth Ann Lipp and Dr. Jerome P. Hochwalt, Dayton; Miss Marcia Bernstein, Youngstown, and Dr. Sanford Kronenberg, Cleveland Heights; Miss Virginia Finley and Dr. Karl S. Russell, Cleveland; Miss Cornelia Harrison, Shaker Heights, and Dr. William Lee Schlesinger, Cleveland; Miss Dorothy Hathaway, Norwood, and Dr. Otto H. Salsbery, Mariemont; Miss Theodora Campbell and Dr. Jack M. Sharp, Norwood; Miss Anne Louise Ferguson and Dr. John Milton Strait, Columbus; Miss Dorothy Day and Dr. Edwin E. Ash, Cincinnati; Miss Doris Kramer, Akron, and Dr. George M. Stroud, III, Cleveland.

The New Federal Food, Drug, and Cosmetic Act and the Practice of Medicine

By THEODORE G. KLUMPP, M.D.

Editor's Note:

● The accompanying article was written by Dr. Klumpp at the request of *The Journal* which is interested in providing its readers with up-to-the-minute information and advice about the Federal Food, Drug and Cosmetic Act and how certain provisions of the act relate to the practice of medicine. At the time he prepared this article, Dr. Klumpp was chief of the Drug Division, United States Food and Drug Administration. Recently, Dr. Klumpp accepted the position of secretary of the Council on Pharmacy and Chemistry of the American Medical Association.

ACCORDING to reliable estimates, the public spent $1,562,438,000 for drugs and drug sundries in 1939.[1] Figures for 1940 are not yet available but there is reason to believe that the total will have been even larger. Just what proportion of this large sum was spent for drugs is not known but most of the items involved, foods, drugs, cosmetics and therapeutic devices, come within the purview of the Food, Drug, and Cosmetic Act, which became fully effective only on July 1, 1940. As physicians, we don't often ponder the question of whether or not the drug we administer or prescribe is what it is supposed to be, or is up to its purported strength, quality or purity or is safe to use. I believe we are apt to take that for granted and yet it is a consideration of utmost importance to the public welfare and the first therapeutic principle of Hippocrates, which is to do no harm. But does it just happen so, or is there a reason why we have so much faith in the reliability of the drugs we use? I think there is a reason.

The manufacture of drugs is a business which has attracted the participation of large and diversified groups of individuals. Some of the concerns are large and maintain highly organized technical and promotional facilities, but the business of manufacturing drugs offers a temptation to druggists who compound prescriptions, chemists who want to go into business for themselves, and many ex-employees of established drug manufacturers. In addition to this, we have the spectacle of numerous patients who believe they have been benefited by a prescription trying to set up a business to market the same prescription and make some money out of it for themselves. This objective is ordinarily interpreted by those involved as a desire to help suffering humanity.

NOT A SIMPLE BUSINESS

The business of manufacturing drugs is not a simple one, and experience has shown that mere size alone is no assurance of reliability. There are innumerable highly complicated technical difficulties. I am told that the most costly single item in the manufacture of drugs in general is the item of control—that is to say, the safeguards which are provided to maintain the strength, quality and purity of drugs and the steps which are taken to maintain unvaried precision in their large scale production. From experience in the regulation of drugs under the law it is evident that in competitive situations there is an almost irresistible temptation to cut on that large item of expense, control. Some of the inadequately experienced manufacturers know very little about this to start with. In some instances—and this was particularly true during the economic depression—attempts were made in the direction of retrenchment by eliminating some of the safeguards of control. The maintenance of the strength, quality and purity of the drugs is not automatic, as illustrated by the numerous actions that are taken each year by the Food and Drug Administration against drugs that are adulterated. For instance, not so long ago samples of a drug labeled "codeine" were examined and found to be morphine. Again, a solution of pituitary shipped by another large manufacturer was found to be twice its labeled strength. According to the court, it was likely that a mixup had occurred in the labeling of the drug. Estrogenic and other glandular products were found at one time to vary widely from the potency claimed on the label. During the four fiscal years July 1, 1936, to June 30, 1940, 243 samples of estrogenic preparations were examined, of which 110, or 45.7%, failed to meet the requirements of the provisions of the Food and Drugs Act or its successor, the Food, Drug, and Cosmetic Act. Fortunately, as a result of the actions of the Food and Drug Administration in this field, this situation has been to a large extent corrected. It is gratifying to note that the percentage of samples of this type of product subject to action has dropped from 64% in the year 1936-7 to 15% in the year 1939-40.

Recent investigations have indicated that there is appearing on the market subpotent digitalis from a number of manufacturers. In a recent law suit that was vigorously contested, the Government proved that the digitalis in question was 50% of labeled potency.

FIGURES ON SEIZURES

It is interesting to note that during the fiscal years 1939 and 1940 examination of 4,787 samples of foods, drugs, devices and cosmetics by the Food and Drug Administration resulted in seizure, prosecution, or injunction proceedings.

In the enforcement of the Food, Drug, and Cosmetic Act the Food and Drug Administration has been severely handicapped by the inadequate appropriation available for this work. Nevertheless, under the limitations so imposed, inspectors are sent to every factory manufacturing foods, drugs, devices and cosmetics to obtain full data and information concerning the manufacturing practices, controls, types of products and sanitary conditions. In addition to this, the inspectors are constantly collecting on the open market samples of the articles that come under the purview of the Act. For instance, during the fiscal years 1939 and 1940 14,356 factory inspections were made. During this period 95,203 samples of foods, drugs, devices and cosmetics were examined in the laboratories of the Food and Drug Administration.

As an added safeguard, reported injuries from drugs, food poisonings and any untoward situation that may have a connection with the interstate commerce in these articles are carefully investigated. Inspectors and, wherever indicated, physicians and bacteriologists are sent at once to obtain full facts, information and samples of the articles in question. For instance, recently it was reported that the administration of a solution of sodium morrhuate by injection resulted in two deaths and three very severe reactions. Investigation of the facts relating to this tragedy and the analysis of samples of the drug itself indicated conclusively that the deaths had not been due to any fault in the composition of the drug.

It may be fairly said that without the degree of control now maintained over drug products there would be significantly less reason for confidence in the reliability of the drugs you as physicians administer. Toward this very important endeavor the medical profession can be of inestimable help. When investigations relating to drugs are made, it should be a matter of civic responsibility for physicians to offer their wholehearted cooperation, either by making available to the Government facts in their possession, results of their experiences with drugs in the treatment of disease, and willingness to appear as fact witnesses or as experts when requested. Unless we have access to records, particularly hospital records, of injuries from drugs, cosmetics and therapeutic devices, we cannot obtain a balanced appraisal of the conditions under which such articles may be dangerous.

For a discussion of the text of the Food, Drug, and Cosmetic Act and the regulations relating to it, the reader is referred to several good publications.[2] Copies of the Act itself and regulations may be obtained upon application to the Food and Drug Administration, Washington, D.C.

NEW DRUGS

Physicians have expressed considerable interest in the new drug section of the Act. A law to supersede the antiquated Food and Drugs Act was under active discussion by Congressional committees for a period of approximately five years, from 1933 to 1938. During the major portion of this time practically no consideration was given to the incorporation of a new drug section in proposed bills. As a matter of fact, many who had the public interest at heart felt that the importance of foods, drugs, and cosmetics in our national economic system and their injurious potentialities warranted a law based upon a licensing system similar to that under which sera, viruses and antitoxins are controlled. This was, of course, vigorously opposed by the industries involved and it was evident throughout the discussion of the new law that such a bill would have no chance whatsoever of passage by Congress.

In September, 1937, a drug manufacturer placed upon the market a wholly untried combination of sulfanilamide in diethylene glycol and and called it Elixir Sulfanilamide. The marketing of this preparation and the fatalities which resulted from it, 105 authenticated deaths, created a national demand for effective protection of the public against the indiscriminate marketing of new and untried preparations. With this tragedy in mind, Congress began consideration of a provision which would prevent the occurrence of similar tragedies from inadequately tested drug preparations. While the deliberations were going on, another drug, the so-called Rex 152, an alleged cancer cure, became contaminated with tetanus toxin and this resulted in the death of twelve individuals. This tragedy, coming so soon on the heels of the Elixir Sulfanilamide incident, undoubtedly served to effectively overcome the very powerful opposition to the contemplated new drug section of the Act.

The new drug section as enacted prohibits the marketing in interstate commerce of new drugs until an application filed with the Administrator of the Federal Security Agency has become effective. The person filing this application is required to submit full information pertaining to the safety of the drug. On the basis of this information or on the basis of any other information, the Administrator is required by law to determine whether or not the drug is safe for use under the conditions of use contemplated. If he has reason to believe that the drug is not safe, he notifies the applicant and offers him an opportunity for a hearing. This hearing is described by lawyers as a quasi-judicial type of hearing and for the purpose of this particular section it is not open to the general public. Should the Administrator hold to his original finding, he issues an order refusing the applicant permission to market the drug. Appeals from this order may be taken by the applicant to one of the United States District Courts.

That Congress recognized the urgent necessity of the new drug section is evident from the fact that provision was made for it to become effective at the time the bill was signed by the President rather than at the end of one year in common with other provisions of the Act.

MANY APPLICATIONS

Since June 25, 1938, the date on which the Act was approved by the President, the Food and Drug Administration has received some 4,000 new drug applications. Each one of these has had to be carefully investigated. In some cases, for instance the drugs sulfapyridine, disulfanilamide, sulfathiazole and stilbestrol, it was necessary to make a nation-wide investigation and obtain for appraisal case histories and data relating to the use of the drugs in many thousands of instances. The problem of obtaining sufficient information to serve as a basis for judgment is particularly difficult since manufacturers ordinarily file new drug applications before an extensive literature on the use of the drug has developed. The responsibility of administering the new drug section of the Act is a particularly grave one since the results of our deliberations may have a nationwide effect on the public health. On the one hand, it is of utmost importance to release drugs, particularly those that have an important therapeutic action, at the earliest possible date. On the other hand, it would be no protection at all to the public to permit drugs to be marketed before there is available sufficient information to provide a considered appraisal of its toxicity. We cannot take any chances with the latter alternative. It would be a serious matter for those entrusted with this responsibility to make many mistakes. The consequence of a single serious error of judgment in this connection might be disastrous and would inevitably have the effect of undermining in the eyes of the public and the medical profession the confidence in and respect of the judgment of those entrusted with this function. The latter might well occur even though flawless judgment were evident in every other decision.

It is not an overstatement to say that for the first time in our history all drug manufacturers are obtaining chemical, pharmacological and clinical data on new drugs before placing them on the market. It is doubtful that the great significance of this to the public welfare will ever be wholly appreciated. As physicians we are all aware of the fact that widespread injury, poisoning and even death may result from drugs without ever becoming generally recognized or even detected in specific instances. At the present time the difficulties of exact diagnosis, the lack of any general provisions for the collection and comparison of data on drug and other intoxications present almost insurmountable barriers. To these factors may be largely attributed the fact that it took 34 years for us to recognize that aminopyrine had anything at all to do with the formidable incidence of agranulocytosis and this—the association between the drug and the disease—was of the very simplest order, particularly in the face of the very high mortality from agranulocytosis.

The staff of the Food and Drug Administration has a unique opportunity to observe how often drug injuries occur without being reported in the literature or attracting general notice except in extraordinary circumstances. As a matter of fact, editors of medical journals are ordinarily loathe to accept for publication repetitious case reports of such injuries unless they have elements of novelty associated with them. Consequently, only a fraction of the fraction of cases diagnosed are ever reported. In our judgment, it would be of great value to the public as well as the profession to provide some medium for recording and reporting all food, drug, and cosmetic injuries. It is hoped that it will be possible for the Food and Drug Administration to undertake this task.

The Elixir Sulfanilamide tragedy came to the surface because of the catastrophic sudden deaths that occurred simultaneously in one community, Tulsa, Oklahoma. But the important point is this: When the flare of publicity subsided the harvest of death had been generally accepted as in the vicinity of 46 lives. But the late Dr. Paul Nicholas, Director of the Division of Foods, Drugs and Physical Therapy, of the American Medical Association, and the medical officers and field staff of the Food and Drug Administration continued painstaking investigations tracking down every clue. When the final chapter of this incident was written, the death toll had mounted to 105 lives lost and about 260 individuals injured.[3] The machinery which was brought into play to expose the extent of the Elixir Sulfanilamide tragedy in terms of lives lost and persons injured is rarely given a chance to operate because lesser clues are rarely simultaneously collected and reported to attract attention. From the volume of isolated incidents that come to our attention, we may be certain that the extent of injuries from foods, drugs and cosmetics has been in the past a much graver problem than is ordinarily appreciated. By the same token, their disappearance under the beneficent influence of the new drug section of the law will be great but never wholly measurable.

The medical profession has an important stake in the benefit which may be derived from the proper operation of the new drug section of the Act. It has also a responsibility to make important contributions to the purpose for which the new drug section was enacted. Without the generous cooperation of physicians, pharmacologists, pathologists, and other experts who administer drugs or observe their effects, the new drug section would become nothing more than an impotent expression of good intention. The problems of drug actions and toxicity are complex. The possibility of minimal repeated tissue insult resulting in chronic injury that may not be revealed in the acute short term experiments that are feasible before a new drug is marketed must always be kept in the forefront of our minds. The ordinary physician rarely has available the time, facility or techniques to make conclusive controlled observations. Our criteria of injury must be something more refined and delicate than the lethal effect of a drug. Unfortunately, many forms of injury can only be detected by instruments of precision and techniques not ordinarily available to the practitioner, when even at best the tools now available are often too crude for the job.

It is to be noted that the law refers to "experts" in the new drug section and not physicians. The term "physician" is employed in other sections of the Act. The implication is inescapable that Congress recognized that all physicians are not necessarily experts in the evaluation of the safety of drugs. Indeed, legal commentaries on the law have emphasized this point.[4]

INCREASE IN FACILITIES

Not only are drug manufacturers increasing their own facilities for research, adding to their staff of chemists, pharmacologists and pathologists, but there has been an unprecedented call upon clinicians and physicians for the testing of new drugs for which manufacturers propose to file new drug applications under the Act. This places upon all physicians a most serious responsibility and it is particularly so because physicians as a class are generous and motivated by a strong instinct to be of help. This instinct is a noble quality when directed toward patients suffering from disease but it is capable of serious consequences when misdirected as an expression of charity to drug manufacturers. On the whole, well trained experts have performed an inestimable public service in the work they have done on new drugs. Without their advice and without the data that they have so generously placed at our disposal, it would be an impossible task to accurately appraise the safety of drugs. In this work the medical profession has added another major contribution to its incomparable influence for good in our national life, but those who strive toward progress and better things cannot contribute to this end by merely praising the good. The burden of their efforts must be against those things that are in need of correction.

In this connection the physician's testimonial is a new and curious spectacle. Through the efforts of the American Medical Association and the Food and Drug Administration, testimonials by laymen have been practically eliminated as a factor in the promotion of drug products, but under the new drug section of the law manufacturers have been turning to physicians and obtaining from many of them what amounts to nothing more than a testimonial letter concerning the new drug. It is to be hoped that when the novelty of the new drug provision of the law has passed that physicians will regain a greater measure of poise and abandon altogether the misguided gesture of the drug testimonial.

HEARINGS ON CASES

It cannot be emphasized too strongly that evaluation of the fundamental questions concerning the toxicity of a drug is an undertaking that demands special training, controls and facilities. The physician who administers a drug to a few patients in the ordinary course of his practice is hardly in position to express an authoritative opinion on the toxicity of the drug.

During the hearing which the law provides before a new drug application is rejected, the manufacturer is given an opportunity to present facts and information to support his application. Physicians are not uncommonly induced by manufacturers to appear at these hearings, testifying under oath to support the contention that a new drug should be turned loose for general use. It is evident that some physicians who have appeared to say a good word for a drug would have thought twice about it had they known in advance that the data they presented would be subject to searching inquiry by pharmacologists, pathologists, chemists, internists and other specialists whose function it is to evaluate the validity and significance of such data. In our judgment, a person who files an application under section 505 should bear in mind that the provisions of that section cast upon the applicant the duty of demonstrating by adequate investigation the safety of the drug with respect to which the application is filed. The section does not leave to the realm of doubt that which can be demonstrated by scientific means. Applicants should exhaust all reasonable means of investigation. The goal should be a demonstration of the safety of the drug, not merely the accumulation, through superficial investigations, of data which the applicant hopes will be sufficient to secure the effectiveness of the application.

DANGEROUS DRUGS

In the administration of section 502(j) of the law which pertains to dangerous drugs, it is apparent that certain fundamental distinctions must be made between drugs dispensed over the counter generally and those offered for sale only under the direction of a physician. In other words, certain drugs may not be dangerous when they are administered by one who has been trained to make an accurate diagnosis and who is familiar with the established indications and contra-indications for the use of a drug. A similar distinction between trained and untrained persons has long since been applied by society in other directions where there is risk to life and welfare. For instance, only individuals who have met certain qualifications and are duly licensed can be permitted to fly transport planes. Even the installation of plumbing and electric wiring in the home must be made in most communities by a trained individual. By the same token, it is clear that certain drugs are potentially dangerous unless administered under such conditions. Toward this end, the Food and Drug Administration has indicated that certain drugs in therapeutically significant amounts would be considered dangerous if shipped in interstate commerce for use without a physician's prescription. In this class, for example, are sulfanilamide and its derivatives, thyroid, benzedrine sulfate tablets, aminopyrine, cinchophen, neocinchophen, cantharides, aconite, chrysarobin, chrysophanic acid, colchicine, colchicum, emetine, phosphides, phosphorus, radioactive drugs, thiocyanates, Causalin, Sedormid. The above list is, of course, not a complete one. As a matter of fact, it would be scientifically untenable to attempt to draw up a fixed and final list of drugs since it must change as scientific facts are developed and further experience serves as a guide.

Further experience throws more light on the effects of drugs. The restriction of such potent and potentially dangerous drugs as are given in the above list places a serious responsibility upon both the medical profession and the druggist. In the past physicians have not always clearly indicated on their prescriptions how many times such prescriptions could be refilled. We have encountered many instances of bromide intoxication and barbiturate habit-formation that were permitted to develop because physicians failed to place "non-repetatur" on their prescriptions or otherwise clearly indicated how many times the prescription was to be refilled. It is to be expected that the medical profession will give more thought to this serious source of indiscriminate drug use. It is, of course, recognized that there are many drugs, such as for instance insulin, which are intended to be dispensed repeatedly over long periods of time. In the enforcement of the law the Food and Drug Administration has no intention of placing an undue burden upon the patient to obtain another prescription unless it is necessary. However, in this matter the pharmacist bears an important legal responsibility. It is his obligation to assure himself before refilling a prescription that it is the physician's direction that such prescription shall be repeated. Otherwise the pharmacist may be guilty of dispensing a dangerous drug.

The failure of labeling to comply with other sections of the Act may likewise have a bearing on whether or not a drug may be considered dangerous for indiscriminate distribution. For instance, a drug which fails to bear adequate directions for use and adequate warnings or both may similarly be considered unsuitable for indiscriminate distribution. To serve as a guide, the Food and Drug Administration has prepared a list of a few simple warning statements which have not been considered objectionable. These may be obtained from the Food and Drug Administration on request.

While the Act was not intended to regulate the practice of medicine, it is evident that many of its provisions will have an important bearing on the health and well being of the general public. The terms of this law should have a significant influence in eliminating such self-medication as may be considered dangerous or based on deception. Likewise, the provisions of the Act which make it necessary to disclose the active ingredients of drug preparations will bring about a more intelligent use of drugs. It is self-evident that its influence should be felt by the medical profession and particularly will this be true if the administration of the Act is implemented with the whole-hearted cooperation of those whose primary concern is the health of our citizens.

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Regulation Changes Are Analyzed

Following receipt of Dr. Klumpp's manuscript, *The Journal of the American Medical Association* published the following editorial comment regarding certain changes in the original regulations issued pursuant to the enactment of the new Federal Food, Drug and Cosmetic Act, which comment is reproduced as supplementary information:

> The Acting Administrator of the Federal Security Agency on April 10 announced amendments to the original regulations promulgated in December, 1938, under sections 502(f), 505(b) and 505(i) of the Food, Drug and Cosmetic Act. The amended regulation under section 502(f) becomes effective on October 7; the other amended regulations took effect May 10.
>
> The amendment of special interest to the medi-

cal profession relates to the regulation previously promulgated under section 502(f), which declares a drug or device misbranded unless its label bears (1) adequate directions for use and (2) adequate warnings against misuse. The application of section 502(f) and the original regulation promulgated under this section to drugs dispensed by physicians or on physicians' prescriptions was discussed in a previous issue of THE JOURNAL by Dr. Theodore G. Klumpp, Chief of the Drug Division of the Food and Drug Administration. The amended regulation exempts from compliance with the requirements of clause (1) of section 502(f) a shipment or other delivery of a drug or device (*a*) if such shipment or delivery is made for use exclusively by or on the prescription of physicians, dentists or veterinarians licensed by law to use such drug or device, (*b*) if the label of the drug or device bears the statement "Caution: To be used only by or on the prescription of a ————" or "Caution: To be used only by a ————" ["physician," "dentist" or "veterinarian" or any combination of two or all of such words to be inserted], (*c*) if no representation appears in the labeling of such drug or device with respect to the conditions for which it is to be used, (*d*) if adequate directions for the use of such drug or device are available in scientific publications or otherwise and (*e*) in case the drug is not designated solely by a name recognized in an official compendium and is fabricated from two or more ingredients, if its label also bears the quantity or proportion of each active ingredient. The amended regulation provides that the exemption shall remain valid until all of such shipment or delivery is dispensed on and under labels bearing the directions for use specified in prescriptions of physicians, dentists or veterinarians. The amended regulation, as does the original regulation, also exempts from compliance with the requirements of clause (1) of section 502(f) any shipment or other delivery of a drug or device (1) with respect to directions for common uses if adequate directions for such uses are known by the ordinary individual or (2) if such drug is made for use exclusively in the manufacture of another drug or device and its labeling bears the statement "For manufacturing use only" and contains no representation relative to the effect of such drug or device. Both the amended regulation and the original regulation declare that the exemptions relative to drugs or devices for use only by or on the prescription of a physician, dentist or veterinarian, or for manufacturing use only, shall expire if any part of the shipment or delivery is disposed of for any use other than by or on the prescription of a physician, dentist or veterinarian or for manufacturing use, as the case may be. Any person causing any such exemption so to expire shall be considered as having committed an act of misbranding unless, prior to such disposition, such drug or device is relabeled to comply with clause (1) of section 502(f).

The amendment to the regulation hertofore promulgated under section 505(b) is of no special interest to physicians and so will not be discussed.

The amended regulation under section 505(i) does affect physicians and others engaged in research. It provides that "new drugs" intended solely for investigational use, which under section 505(i) are exempt from the provisions of the act relating to "new drugs," be labeled "Caution: New drug—Limited by Federal law to investigational use" instead of the labeling required under the original regulation "For investigational use only." It requires (*a*) that the shipment or delivery of such a drug be made only to, and solely for investigational use by or under the direction of, an expert qualified by scientific training and experience to investigate the safety of such drug, (*b*) that the person introducing such a shipment or delivery into interstate commerce obtain a signed statement from the expert investigator that he has adequate facilities for the investigation and that the drug will be used solely by him or under his direction for purposes of investigation, unless or until an application becomes effective with respect to such drug under section 505 of the act and (*c*) that the shipper preserve such statement together with complete records showing the date and quantity of each shipment or delivery and make them available for inspection on the request of a representative of the Federal Security Agency until three years after the introduction of such shipment or delivery into interstate commerce. It is provided that the exemption from the provisions of the act relating to new drugs shall become void if the shipper fails to preserve or make available for investigation the investigator's signed statement and the other records required or if any part of such shipment or delivery is used other than in accordance with the investigator's statement.

These regulations result from experience and are planned in the interest of protection of the public health. They do not place any added burden on the medical profession. They provide opportunity for research with new preparations and at the same time protect the public against precipitous exploitation of new drugs.

A.M.A. To Start Gathering Data for New Directory Soon

Shortly after September 1 the American Medical Association will begin to secure information to be used in the compilation of the Seventeenth Edition of the American Medical Directory. An information card will be sent from the A.M.A. to every doctor of medicine in the United States and Canada. Physicians should fill out the information card carefully and return it promptly whether or not a change has occurred in any points on which information is requested. They are especially urged to state whether or not they are on extended active duty for the Medical Reserve Corps of the United States Army and Navy. If a change of address occurs before March 1, 1942, it should be reported to the A.M.A. at once. Any physician who fails to receive an information card before October 1, should write to the A.M.A., stating that fact and indicating such changes as he may desire in the information published in the 1940 issue of the directory.

The American Medical Directory is prepared at regular intervals by the Biographic Department of the American Medical Association. The last previous edition appeared in 1940. It contains dependable data concerning physicians, medical organizations, hospitals, medical schools, etc., and is considered one of the most important contributions of the American Medical Association to the work of the medical profession in the United States.

In Memoriam

Edmund Russell Brush, M.D., Zanesville; Ohio State University College of Medicine, 1909; aged 56; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; died July 28. A native of Zanesville, Dr. Brush practiced there for 32 years. He was a former chief of staff at Bethesda Hospital, and for the past two years had been city health commissioner. Through the years he had maintained an active interest in medical organizations, local, state and national. Dr. Brush had served the Muskingum County Academy of Medicine as legislative committeeman and a member of the Medical Defense Committee For 16 years he was a member of The Council of the Ohio State Medical Association, representing the Eighth District from 1921 to 1927, and from 1929 to 1939. He had been a member of many important Association committees, most recently the Committee on Medical Preparedness. Dr. Brush was a member of the House of Delegates of the American Medical Association for 16 years, having served continuously since 1926. He was a lieutenant-colonel in the Medical Reserve Corps of the U.S. Army, a rank which he attained while in service in France during World War I. Prominent in the affairs of his community, Dr. Brush was the first commander of the local American Legion Post, a member of the Rotary Club and various Masonic Orders. Surviving are his widow, two daughters, two sisters and two brothers.

Joseph Harris Ball, M.D., Cleveland; University of Michigan Homeopathic Medical School, Ann Arbor, 1898; aged 68; died July 18. Dr. Ball was formerly secretary of the Michigan State Homeopathic Society and was a member and officer of the Ohio State Homeopathic Society. Survivors are his widow and one son.

Bruce Bruette Barber, M.D., Ashley; Ohio State University College of Medicine, 1911; aged 59; former member of the Ohio State Medical Association and the American Medical Association; died July 9. Following graduation Dr. Barber was a member of the medical staff of the Columbus State Hospital for five years, and then practiced in Ashley for ten years. He was health commissioner of Delaware County for over 10 years, retiring in September, 1939, because of ill health. Dr. Barber was a member of the Masonic Order. Surviving are his widow, a son, a daughter, a brother and a sister.

Frank Raymond Dew, M.D., Oberlin; Ohio Medical University, Columbus, 1904; aged 63; member of the Ohio State Medical Association and Fellow of the American Medical Association; died July 20. Health commissioner of Lorain County for the past seven years, Dr. Dew was president of the Lorain County Medical Society in 1940. He was previously health commissioner in Belmont County for 12 years. During World War I Dr. Dew was a captain in the Medical Corps of the U. S. Army, serving two years in France. Active in community affairs at Oberlin, he was one of the organizers and first president of the Rotary Club, and a former commander of the American Legion Post. Dr. Dew was chief examiner for the local draft board. He was a member of the Presbyterian Church and the Masonic Order. His widow, a daughter, four sons, two sisters and a brother survive.

William Orson Ellsworth, M.D., Austinburg; Western Reserve University School of Medicine, Cleveland, 1885; age 81; died August 2. Dr. Ellsworth practiced in Cleveland three years and in Austinburg for 53 years. He had been a member of the local school board. Two daughters and a son survive.

Clyde DeWitt Frost, M.D., Baltimore, Md.; Western Reserve University School of Medicine, Cleveland, 1920; aged 50; former member of the Ohio State Medical Association and the American Medical Association; died July 5. Dr. Frost was director of the Union Memorial Hospital at Baltimore, Md. From 1921 to 1928 he was assistant director of Lakeside Hospital, Cleveland, and afterwards associated with the medical services of the Julius Rosenwald Fund. Surviving are his widow, two children, his mother, a sister and a brother.

Wesley L. Furste, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1905; aged 57; member of the Ohio State Medical Association and the American Medical Association; died July 29. Dr. Furste practiced in Cincinnati for 35 years. Actively interested in athletics, he was examining physician for the Cincinnati Boxing and Wrestling Commission for many years and formerly coached the tennis team of St. Xavier University. Dr. Furste also sponsored bowling teams. In 1928 he was president of the Ohio State Golfers Association. His widow, a son—Dr. Wesley L. Furste, Jr., Columbus, and his father survive.

Frank Lyon Gibbs, M.D., Chillicothe; Pulte Medical College, Cincinnati, 1896; aged 70; died July 9. Dr. Gibbs was city treasurer of Chillicothe from 1918 to 1934. He had given up the practice of medicine after becoming an invalid, and operated a book shop from his residence. Dr. Gibbs was a Mason. A sister survives.

Walton Marion Haggett, M.D., Chicago, Ill.; College of Physicians and Surgeons, Keokuk,

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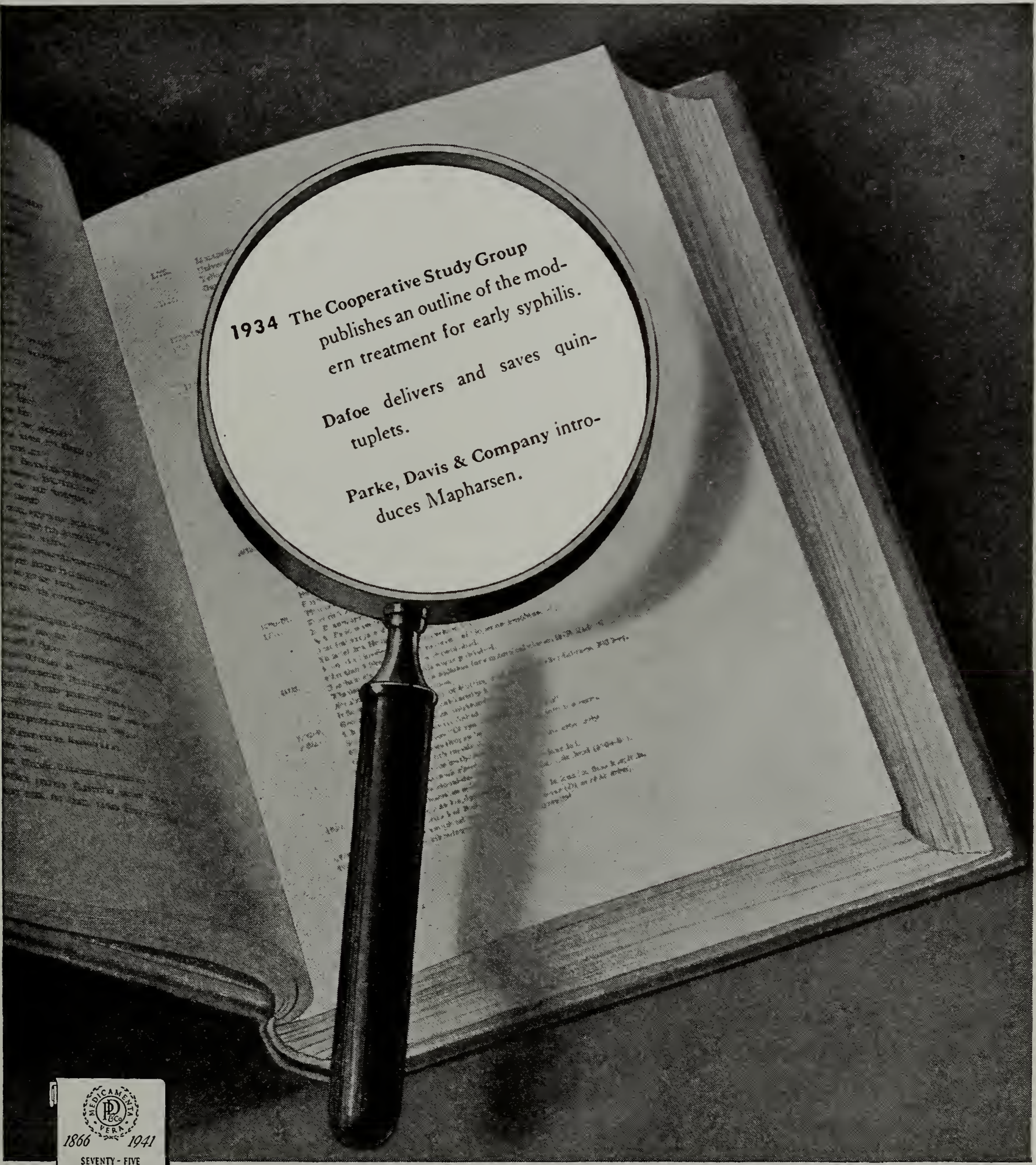

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Iowa, 1887; aged 83; died July 16. A native of Shelby County, Dr. Haggett formerly practiced in Delaware. A daughter survives.

Clement Levi Jones, M.D., Springfield; Johns Hopkins University School of Medicine, 1903; aged 65; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Physicians; diplomate of the American Board of Internal Medicine and member of the American Heart Association; died August 2. Dr. Jones had practiced in Springfield for 37 years, and was a past-president of the Clark County Medical Society. He was a member of the Lutheran Church and various Masonic Orders. His widow and a daughter survive.

Charles S. Lehner, M.D., Akron; Ohio State University College of Medicine, 1916; former member of the Ohio State Medical Association and the American Medical Association; died July 3. Dr. Lehner practiced in Akron for 12 years. During World War I he served as a captain in the 146th Ambulance Corps, 37th Division. He was a member of the American Legion. Surviving are his widow and a brother.

Murray B. McGonigle, M.D., Toledo; Ohio Medical University, Columbus, 1900; aged 68; member of the Ohio State Medical Association; Fellow of the American Medical Association; member of the American Urological Association; died July 29. Dr. McGonigle practiced in Ashley for 11 years and in Toledo for 31 years. He was a veteran of World War I and a member of the American Legion. Surviving are two daughters, two sisters and two brothers.

Robert Joseph O'Donnell, M.D., Cincinnati; Medical College of Ohio, Cincinnati; aged 67; former member of the Ohio State Medical Association and the American Medical Association; died July 15. A former resident of Cincinnati, Dr. O'Donnell had returned there recently after having been in California for 10 years. While in Cincinnati he had been prominent in the activities of the Knights of Columbus, and in Democratic politics. Dr. O'Donnell was the Democratic nominee for Congress from the Second District in 1924. He was a member of the Catholic Church. Surviving are his widow, a brother and a sister.

Arthur Bernard Ossege, M.D., Perrysburg; St. Louis University School of Medicine, 1926; aged 39; member of the Ohio State Medical Association and the American Medical Association; died July 17. A member of the visiting staff at St. Vincent's Hospital, Toledo, Dr. Ossege had practiced in Perrysburg for 15 years. He was a member of the Catholic Church. Surviving are his widow, a son, his mother, two sisters and a brother.

Clifford Sater, M.D., Cincinnati; Miami Medical College, Cincinnati, 1901; aged 70; died June 28. Dr. Sater practiced in Cincinnati for nearly 40 years.

Alpheus Mahlon Shafer, M.D., Massillon; Western Reserve University School of Medicine, 1917; aged 52; member of the Ohio State Medical Association and the American Medical Association; died July 23. Dr. Shafer practiced in Massillon for over 20 years. A brother and a sister survive.

Chauncey Thurston Shearer, M.D., Columbus; Chicago College of Medicine and Surgery, 1911, aged 57; member of the Ohio State Medical Association and Fellow of the American Medical Association; died July 18. A medical examiner for the Pennsylvania Railroad, Dr. Shearer resided in Steubenville prior to moving to Columbus six years ago. He had previously practiced in Phillips County, Kansas, and Chicago. Dr. Shearer was a member of the Presbyterian Church and also belonged to the Masons, Eagles, and Woodmen of the World. Among his survivors are a son, Dr. Gerhard Shearer, of San Francisco, and his widow and half-sister.

Elmore LeRoy Steele, M.D., Akron; University of Western Ontario Medical School, 1914; aged 51; member of the Ohio State Medical Association and the American Medical Association; died August 2. Dr. Steele was a captain in the Royal Army Medical Corps in 1916-1919, and served in Canada, Great Britain, India, Egypt, Palestine and Mesopotamia.

Louis Lawrence Syman, M.D., Springfield; Starling Medical College, Columbus, 1898; aged 70; member of the Ohio State Medical Association and the American Medical Association; died July 16. After practicing 33 years Dr. Syman retired in 1931. He was a member of the American College of Physicians. Before studying medicine he had worked as a newspaperman, serving as first city editor of the *Springfield Sun* and previously in the same capacity on the Marion (Ind.) *Tribune.* Dr. Syman served as a physician in the United States Army Medical Corps during the Spanish-American War and the World War. During his medical military career he was regimental surgeon of the 362nd Infantry, 91st Division; brigade surgeon of the 181st Brigade; assistant regimental surgeon of the Third Regiment, Ohio National Guard; and physical examiner of recruits in 1898. He was a graduate of the United States Army Medical School, Fort Riley, Kansas, and held a captaincy in the medical reserve corps until 1928. He was active in Masonry, a member of the Scottish Rite, and a member of the United Spanish War Veterans and the American Legion. Survivors include a foster daughter and three brothers.

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Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

HAMILTON

The following new officers of the Cincinnati Academy of Medicine will be installed at the first meeting of the Academy in September: President, Dr. John H. Skavlem; president-elect, Dr. Ralph G. Carothers; secretary, Dr. Harry L. Fry; and treasurer, Dr. Richard D. Bryant.

HIGHLAND

Dr. J. E. Pirrung and Dr. E. A. Schlueter, Cincinnati, discussed "Ulcers and Cancer of the Stomach and Duodenum", at a meeting of the Highland County Medical Society, July 2, at Hillsboro.—News clipping.

Speaker at the Highland County Medical Society meeting held Wednesday, August 6, at Greenfield, was Dr. Walter H. Hamilton, of Columbus. He discussed "Diagnosis, Significance and Treatment of Rectal and Colon Disorders, With Special Reference to Cancer."—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

GREENE

"Differential Diagnosis of Poliomyelitis", was the subject presented by Dr. S. H. Ashmun, Dayton, at a meeting of the Greene County Medical Society, Thursday, August 7, at the Court House, Xenia.—Donald F. Kyle, M.D., secretary.

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

CUYAHOGA

Dr. John A. Toomey, professor of clinical pediatrics and contagious diseases, Western Reserve University School of Medicine, Cleveland, spoke on "The Diagnosis of Infantile Paralysis", at a special meeting of the Academy of Medicine of Cleveland, Sunday afternoon, August 10, at the Medical Library Auditorium.—A. C. Ernstene, M.D., secretary.

The Board of Directors of the Cleveland Academy of Medicine has elected the following officers to serve the academy during the ensuing year: President, Dr. Roscoe D. Leas; vice president, Dr. Harley A. Williams; secretary-treasurer, Dr. A. Carlton Ernstene.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

GUERNSEY

At a meeting of the Guernsey County Medical Society, Thursday noon, July 17, at the Berwick Hotel, Cambridge, Dr. Richard D. Gill, Wheeling, spoke on "Obstruction of the Ureters".—News clipping.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

RICHLAND

Twenty-five members of the Richland County Medical Society attended its regular summer outing held July 17 at the Shelby Country Club.—News clipping.

WAYNE

Members of the Wayne County Medical Society held their annual picnic, with their families and friends to the number of about 70, on the beautiful lawn at the State Hospital, Apple Creek, July 25. Superintendent A. T. Hopwood and his estimable wife were host and hostess, and that the affair was a complete success was largely due to their thoughtfulness in preparing the tables and the corps of efficient nurses who acted as assistants. The bounteous dinner was of course due to the culinary expertness of the wives of the physicians, which very evidently shows why most physicians grow heavier as the years roll by. Dr. Hopwood gave a very clever address, illustrated by slides, dividing the types of his patients into general classes and showing the effect of heredity on many in the Apple Creek institution and other hospitals of similar type.—R. C. Paul, M.D., secretary.

Sollmann Portrait Unveiled

Alumni of the School of Medicine of Western Reserve University at their Annual Reunion Dinner, Tuesday, June 3, at Cleveland unveiled a portrait of Dr. Torald Sollmann, dean and professor of pharmacology of the school. Dr. Joseph T. Wearn, professor of medicine, presented the portrait, and it was accepted by President W. G. Leutner of the University. It was painted at the request of 600 alumni and friends of Dean Sollmann by Charles Sidney Hopkinson, Boston, leading American portrait painter, particularly distinguished for his portraits of war celebrities, and of such personages as Dean Roscoe Pound and Dr. George Lyman Kittredge of Harvard University. Dr. Sollmann, who has been dean of the School of Medicine of Western Reserve University, of which he is an alumnus, since 1928, is also chairman of the Council on Pharmacy and Chemistry of the American Medical Association.

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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The Physician's Bookshelf

The Story of Clinical Pulmonary Tuberculosis, by Lawrason Brown, M.D. ($2.75. *Williams & Wilkins, Baltimore),* is a posthumous publication of the story of tuberculosis as told to his students. Doctor Brown's own notes have been carefully edited and supplemented by his collaborators. Anyone interested in tuberculosis or in the story of medicine must add this volume to his library.

Infantile Paralysis, A Symposium Delivered at Vanderbilt University, April, 1941. *(The National Foundation for Infantile Paralysis, Inc., 120 Broadway, New York City.)* This is a series of six lectures which represent an effort to bring together a resume of the present-day knowledge of this disease. It delineates the extent of our advance and the limitations of our contributions. The Foundation is to be congratulated upon this project.

The Foundations of Neuro-Psychiatry, by Stanley Cobb, M.D. ($2.50. *Williams & Wilkins, Baltimore),* is a revised edition of the author's book, "A Preface to Nervous Disease". Provides us with a thoroughly modern review that fortunately is very readable.

School Health Services, by W. Frank Walker, Dr. P. H., and Carolina R. Randolph ($1.50. *Commonwealth Fund, 41 E. 57th, New York City),* is a study of the conduct of school health services among some 58,000 children over a six-year span carried on jointly by the Tennessee Department of Public Health and the Commonwealth Fund. The findings are important to all health workers, physicians, and educators who are concerned with the health of school children.

Clinical and Experimental Investigations of the Genital Functions and Their Hormonal Regulation, by Bernhard Zondek. ($4.50. *Williams & Wilkins, Baltimore),* is a report of the work of this distinguished investigator done during the last four and one-half years since he moved to Jerusalem.

Good Neighbors, Argentina, Brazil, Chili, and Seventeen Other Countries by Hubert Herring ($3.00. *Yale University Press, New Haven, Connecticut),* is a story of inter-American affairs told from a realistic viewpoint by one who for 15 years has been the Director of the Committee on Cultural Relations with Latin America. An important and timely volume.

The Trailer Doctor, by Carlton Williams ($2.00. *The Penn Publishing Company, Philadelphia.)* When his world crashed around him the young Doctor Jewett fitted up a trailer with a little traveling hospital and drove it to remote lumber camps and fishing resorts of the north woods. Not a bad evening's reading.

Pediatric Bibliography, by A. Graeme Mitchell, M.D. *(Society for Research and Child Development, National Council, Washington, D.C.),* is one of the monographs of the Society. This is not a complete list but a very practical one, originally designed to be used with the third edition of the author's text.

Medicine and Human Welfare, by Henry Sigerist. *(Yale University Press.)* The author paints the past, the present and the future in his delightful manner. His discussion of the present is quite critical of the inadequacies of the distribution of medical services, and points out how a proper ordering of medicine and our society could prevent a great deal of distress. How wonderful our future could have been if we were only rational beings!

Doctors Don't Believe It, Why Should You? by A. A. Thomen, M.D. ($2.50. *Simon and Schuster, New York City),* exposes facts and fallacies about health for the practical guidance of the layman. Its material is presented in a very effective manner by dividing it into 254 numbered sections, each section setting forth in the form of answers and questions important things that the layman should know, on the principle that it is what you know that is not so that is the greatest handicap. After the popular fallacies have been exploded the author gives constructive advice on what to do.

Outlines of Industrial Medical Practice, by Howard C. Collier, M.D. ($5.00. *A William Woods book, Baltimore, Maryland),* is a text book intended for industrial physicians. This distinguished British author gives us a work of great importance at the present time, because the experience of the last World's War showed conclusively that the neglect of the worker's health had a most serious effect upon industrial efficiency.

Medicine Preferred, by E. Francis McDevitt ($1.50. *Fortuny's, New York),* is a modern play in three acts, filled with the tragedy of idealism in a practical world. It brings out nicely why some of the problems arise and how ideals must be blended with experience.

The Mask of Sanity, by Hervey Cleckley, M.D. *(C. V. Mosby Company, St. Louis),* is an attempt to reinterpret the so-called psychopathic personality. Its reading will prove most helpful in your daily work no matter what it is.

Help Your Doctor to Help You Series. (96 cents each. *Harper and Brothers, New York City).* 1. Gastric or Duodenal Ulcer, covers very well the subject from the point of view described. 2. Gallstones and Diseases of the Gall Bladder supplements, but does not replace good medical

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Death Comes to Tea, by Theodora DuBois ($2.00. *Houghton, Mifflin Company, Boston)* is the story of the fifth murder in the family of Dr. Jeffrey McNeill. This one is interesting and entertaining. With the help of her two physician friends, the author has made it medically intriguing.

The Devil and the Doctor, by David H. Keller ($2.00. *Simon and Schuster, New York)* is a homespun tale of a kindly country doctor by one who had 14 years' experience. In this simple background comes the mysterious miracle worker whose story makes us day dreamers long for his friendship. You cannot spend a more pleasant Winter evening than in the pages of this tale.

Abdominal Surgery of Infancy and Childhood, by William E. Ladd, M.D., and Robert E. Gross, M.D. ($10.00. *W. B. Saunders and Company)* is devoted to that part of children's surgery which involves the abdomen. The staff of Boston Children's Hospital in the last 25 years has amply justified the idea that the surgery of children demands special examinations, detailed pre-operative and post-operative care and a more specialized and delicate operative technique. The staff does not go so far as to say that pediatric surgery should be set apart as a children's specialty, but it does believe that infants and children can obtain surgical care as a number of men in each clinic will take a particular interest in this field and give it the attention that it richly deserves. The authors have given us an excellent monograph setting forth the experiences of this staff.

Start Today, by C. Ward Crampton, M.D., ($1.75. *A. S. Barnes and Co., New York City)* is a guide to physical fitness. It appears at a time when all of our citizens need to be physically and mentally fit. Physical fitness cannot be separated from mental fitness and so this is a book which would make each of us a fit unit in society. In these days when we are placing so much emphasis on nutrition, we should not forget that a state of good nutrition is brought about by the coordination of three factors, good food, the ability to digest and assimilate that food, and good physical tone, brought about by exercise.

Play for Convalescent Children in Hospitals and at Home, by Anna Marie Smith ($1.60, *A. S. Barnes and Co., New York City)* shows what can be done with play when it is made an integral part of the convalescent care of children and when it is considered a fundamental part of the education of pediatric nurses.

Oral Pathology, by Kurt H. Thoma, D.M.D. ($15.00. *C. V. Mosby, St. Louis)* presents the histological, roentgenological, and clinical studies of the diseases of the teeth, jaws, and mouth with 1,370 illustrations of which 137 are in color. This book is encyclopedic in its content and the various topics are taken up in an authoritative manner, and where the material is controversial it is treated in a judicial manner. In these days when so much is being said about nutrition this author's analysis of the subject of dental caries is well worth reading.

Schizophrenia in Childhood, by Charles Bradley, M.D. ($2.50. *Macmillan, New York)* is an analysis of the literature brought forward as a part of the Research in Dementia Praecox supported by the Supreme Council, 33° Scottish Rite Masons; upon the background of the literature and his personal experiences the author then presents a practical concept.

The March of Medicine ($2.00, *Columbia University Press, New York City)* is the fifth volume of the New York Academy of Medicine lectures to the laity. These lectures have come to have an important place in lay educational work. In this volume there are lectures by Abraham Myerson, Perrin H. Long, Paul Rezni-

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5	8	8
6	10	10
7	12	12

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Elimination Diets and the Patient's Allergies, by Albert H. Rowe, M.D. ($3.00. *Lea and Febiger, Philadelphia)* is a handbook of food allergies in which the author reasserts the value of his elimination diets and emphasizes that the failure to use trial diets as a routine when food allergy is suspected, often prevents the recognition and therefore the relief of many of its manifestations. Contrary to the practice of many who have attempted elimination procedures the author never loses sight of the necessity for protecting nutrition with adequate protein, calories, vitamins, and minerals. This is a practical book for the practicing physician.

Modern Drug Encyclopedia and Therapeutic Guide, by Jacob Gutman ($10.00, *New Modern Drugs, New York City)* presents a description of 11,114 medicinal preparations. It is designed to be a desk book for the practitioner. In addition to recognized products, non-official remedies, non-council accepted, which are popular with the medical profession are presented. It will relieve of the necessity of saving all the advertisements which come to your desk.

Your Teeth, Their Past, Present and Probable Future, by Peter J. Brekhus, D.D.S. ($2.50. *University of Minnesota Press, Minneapolis)* is a critical treatment by an author with long experience with dental practitioners, teachers and investigators. He gives us both the practical and theoretical viewpoint together with a frank appraisal of existing information. It is refreshing to read his judicial evaluation of the problem of dental caries at a time when more knowledge is badly needed. Too many of us, both physicians and dentists, are interested in developing our own theories rather than giving practical advice to people about the preservation of their teeth. There is a lot of educational work that can be done on a sound basis without resorting to prejudices or flights of fancy. With our attempts to answer the increasing number of questions by our patients about nutrition, this book deserves very careful reading by all of us.

Third Annual Ohio State Safety Conference will be held September 23, 24 and 25 at Hotel Cleveland, Cleveland.

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Public Auditorium, Minneapolis, Minnesota, October 13, 14, 15, 16, 17, 1941

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Ernest H. Falconer, San Francisco, Cal.
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Henry J. Gerstenberger, Cleveland, Ohio
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Roscoe R. Graham, Toronto, Canada
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Russell L. Haden, Cleveland, Ohio
Emile F. Holman, San Francisco, Cal.
Verne C. Hunt, Los Angeles, Cal.
Thomas E. Jones, Cleveland, Ohio
Elliott P. Joslin, Boston, Mass.
Louis J. Karnosh, Cleveland, Ohio
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Hobart A. Reimann, Philadelphia, Pa.
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Virgil P. W. Sydenstricker, Augusta, Ga.
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A program will be mailed to every member of the medical profession in good standing in the United States and Canada on or about September first. Any member of the profession in good standing who does not receive a program, please write the Managing-Director and one will be mailed.

Comprehensive Scientific and Technical Exhibit. Special Entertainment for the Ladies

Ohio Physicians Ordered To Active Military Service In Past Month

During the past month, orders calling Ohio physicians into active military service or revoking previous orders were issued as follows:

Basic Flying School, Montgomery, Ala.: 1st Lt. Chas. Joseph Young, Cincinnati.

Baer Field, Ft. Wayne, Ind.: 1st Lt. Milton Henry Gustafson, Cleveland.

Kelly Field, Texas: 1st Lt. Herman M. Turk, Lima.

Ft. George C. Meade, Maryland: Major Geo. Platt Tyler, Jr., Ripley.

Ft. Hayes, Ohio (Station Hospital): 1st Lt. David Dennis Dunn, Cleveland; 1st Lt. Bayard Martin Keller, Cuyahoga Falls.

Ft. McClellan, Ala. (151st Medical Battalion): 1st Lt. Luebert Docter, Toledo; 1st Lt. John David Latta, Jerusalem; 1st Lt. Eugene Joseph Stanton, Elyria; 1st Lt. Harry Dworkin, Cincinnati; 1st Lt. Paul Gerhard Meckstroth, New Knoxville.

Camp Forrest, Tenn. (107th Cavalry): 1st Lt. Ralph Henry Leyrer, Hamilton.

Ft. Thomas, Ky. (Station Hospital): 1st Lt. Benjamin Joseph Wood, Cleveland.

Ft. Knox, Ky. (Corps Area Service Command): 1st Lt. William Andrew Smith, Mansfield; 1st Lt. Isadore Irving Binzer, Toledo; 1st Lt. Elmer Troy McCune, Sebring; 1st Lt. Richard Carl Light, Lima; 1st Lt. Mortimer Herzberg, Jr., Cincinnati; 1st Lt. Milton Ross Ort, Columbus; 1st Lt. James Joseph Thomas, Alliance.

Ordered to active duty by War Department, Washington, D. C.: 1st Lt. Elgie Karl Johnson, Columbus; 1st Lt. Ralph Wolpaw, Cleveland; Capt. Edward Andrew Yurick, Cleveland.

Medical Reserve Corps Officers, ordered to active duty by the Commanding General, Fifth Corps Area: 1st Lt. Irwin C. Albert, Cincinnati—to Ft. Thomas, Ky.; 1st Lt. John T. Crone, Jr., Milford—to Ft. Knox, Ky.; 1st Lt. Sidney L. Davidow, North Jackson—to Air Base, Ft. Wayne, Ind.; 1st Lt. Gerard A. DeOreo, Cleveland Heights—to Ft. Thomas, Ky.; 1st Lt. John F. Hauss, Celina—to Air Base, Charlotte, N. C.; 1st Lt. Robert E. Holmberg, Cleveland—to Air Base, Ft. Wayne, Ind.; Capt. Robert L. Johnston, Silverton—to Ft. Leonard Wood, Mo.; 1st Lt. Victor N. Kistler, Columbus—to Ft. Wayne, Ind.; Capt. Edward P. Neary, Cleveland Heights—to Ft. Knox, Ky.; 1st Lt. Phillip L. Rossman, Cleveland—to Ft. Wayne, Ind.; 1st Lt. Victor M. B. Strauss, Cincinnati—to Ft. Wayne, Ind.; 1st Lt. Earl C. Van Horn, Springfield—to Ft. Knox, Ky.; 1st Lt. Edward A. Votypka, Cleveland—to Ft. Knox, Ky.

Orders Revoked: 1st Lt. Oscar Julius Rosen, Cleveland, previously ordered to Basic Flying School, Montgomery, Ala.; 1st Lt. James Douglas Phinney, Cincinnati, previously ordered to Kelly Field, Texas.

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(1) 1940. Am. J. Pub. Health 30, 169.
1939. Food and Life, Yearbook of Agriculture, U. S. Dept. Agr., U. S. Government Printing Office, Washington, D. C., page 276.
1939. Accepted Foods and their Nutritional Significance, Council on Foods of the American Medical Association, Chicago, page 236.
1934. Am. J. Pub. Health 24, 194.

The Seal of Acceptance denotes that the nutritional statements in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

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Laboratories Approved for Tests Under Premarital Examination Law, Effective on August 18

Under the provisions of Ohio's new premarital examination law, now in effect, serological blood tests for syphilis must be made in laboratories approved by the State Department of Health. The following revised provisional list of approved laboratories was issued by that department on August 15:

Akron—Dr. Margaret R. Baker, Children's Hospital.

Bowling Green—J. R. Beck, Bowling Green Clinical Laboratory, Bank Bldg.

Bryan—Dr. Don F. Cameron, Cameron Hospital, Central Drive.

Canton—Dr. Raymond S. Rosedale, Mercy Hospital Laboratory.

Cincinnati—Dr. Maynard O. Brown, 5 West Fourth St.; Mary B. Day, Manager, Langdon-Meyer Laboratories, 519 Main St.; Dr. William MeKee German, Director of Good Samaritan Hospital Laboratory; Dr. Douglas Goldman, 630 Vine St.; Dr. John W. Leichliter, Christ Hospital; Dr. Aurelia P. McIntyre, 903 Carew Tower; Charles J. Rosebrook, Director, Rosebrook Clinical Laboratory, 580 Doctors' Bldg.

Cleveland—Dr. Rafael Dominguez, St. Luke's Hospital; Dr. Benjamin S. Kline, Mount Sinai Hospital; Dr. Henry A. Lichtig, Polyclinic Hospital; Dr. D. J. Rehbock, St. Vincent Charity Hospital; Cleveland City Hospital Laboratory; Dr. Harry J. Sneiderman, 968 Hanna Bldg.; Dr. E. Goodsitt, Huron Road Hospital; Dr. Russell L. Haden, Cleveland Clinic; Dr. John L. Work, St. Alexis Hospital.

Columbus—Dr. Horace B. Davidson, 188 East State St.; Dr. Anson L. Brown, 327 East State St.; Dr. Roswell S. Fidler, White Cross Hospital; Dr. Ralph M. Hartwell, St. Francis Hospital; Dr. David Van Brown, Children's Hospital; Elizabeth M. Myers, 240 East State St.; Dr. H. L. Reinhart, Starling-Loving University Hospital; Dr. J. J. Coons, Clinical & Pathological Laboratory, 370 E. Town Street; E. O. Prewitt, 247 East State Street.

Dayton—Dr. Walter M. Simpson, Miami Valley Hospital; Dr. Charles A. Dille, 880 Fidelity Bldg.

Dover—Dr. Max Shaweker, Union Hospital.

Fremont—Dr. J. L. Curtin, Memorial Hospital.

Gallipolis—Dr. Leo C. Bean, Gallipolis Clinic Laboratory, 52 State Street; Dr. C. E. Richards, Holzer Hospital.

Lancaster—Dr. H. M. Amstutz, Lancaster Municipal Hospital.

Lima—Dr. John LoCricchio, Lima Memorial Hospital.

Toledo—Dr. S. S. Hindman, Women's and Children's Hospital; Dr. Theodore Zbinden, Flower Hospital Pathological Laboratory; Dr. A. H. Schade, Lucas County Hospital; Dr. Thomas LeRoy Ramsey, Clinical Laboratory, 225 Michigan Street; Dr. A. H. Schade, Robinwood Hospital; Dr. Bernhard Steinberg, Toledo Hospital.

Youngstown—Dr. William Dean Collier, St. Elizabeth's Hospital; Dr. Gabriel B. Kramer, Youngstown Hospital.

Lima—Acting on recommendations of the Memorial Hospital board of trustees, a five-member committee has started a study of ways and means of constructing an addition to the institution to accommodate a steadily increasing demand for hospitalization facilities.

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MEDICINE—Two Weeks Intensive Course starting October 6th. Two Weeks Course in Gastro-Enterology starting October 20th. One Month Course Electrocardiography & Heart Disease every month, except December.

FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course starting September 22nd. Informal Course every week.

GYNECOLOGY—Two Weeks Intensive Course starting October 20th. Twenty Hour Personal Course in Vaginal Approach to Pelvic Surgery starting November 3rd. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course starting October 6th. Informal Course every week.

OTOLARYNGOLOGY—Clinical and Special Courses starting every week.

OPHTHALMOLOGY—Two Weeks Intensive Course starting September 22nd. Five Weeks Course in Refraction Methods starting October 13th. Informal Course every week.

ROENTGENOLOGY—Courses in X-Ray Interpretation, Fluoroscopy, Deep X-Ray Therapy every week.

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New York Physicians To Speak at Northwestern Ohio Meeting, Oct. 7

Ninety-seventh Annual Meeting of the Northwestern Ohio Medical Association will be held on Tuesday, October 7, at Napoleon. An interesting refresher course program, including morning and afternoon sessions and a luncheon, has been arranged.

The guest speakers will be the following members of the faculty of the New York Postgraduate Medical School, Columbia University: Dr. Rupert F. Carter, Dr. Irving S. Wright and Dr. Zacharis Bercovitz. Dr. Carter will discuss "Medical and Surgical Diagnosis and Treatment of Gallbladder Disease"; Dr. Wright, "The Problem of Peripheral Vascular Disease"; and Dr. Bercovitz, "The Diagnosis and Treatment of Acute and Chronic Dysentery".

Plans are being made for a noted guest speaker for the luncheon session but a definite announcement cannot be made at this time.

Physicans from all parts of Ohio are cordially invited to attend the meeting which is sponsored by members of the medical profession of the Third and Fourth Councilor Districts of the Ohio State Medical Association.

Details for the meeting are being made by the following officers of the association: President, Dr. Fred Maurer, Lima; vice president, Dr. B. F. Mowry, Findlay; secretary, Dr. C. L. McKibben, Toledo, and treasurer, Dr. John Leahy, Tiffin.

Congress on Physical Therapy To Be Held in Washington, Sept. 1-5

The twentieth annual scientific and clinical session of the American Congress of Physical Therapy will be held September 1 to 5, inclusive, at The Mayflower Hotel, Washington, D. C.

The mornings will be devoted to the annual instruction course, and the afternoons and evenings will be devoted to the scientific and clinical sessions. The seminar and convention proper will be open to all physicians and qualified technicians.

All the phases of physical medicine will be covered in the general program, including a special symposium on poliomyelitis.

Ruling on Drugs to Be Enforced

One of the standing rules of the State Industrial Commission is that "Extra fees for dressing material and drugs will not be approved except in unusual cases wherein an extraordinary amount of such material or drugs is used. In such cases, the material or drugs used will be paid for at cost." A memorandum issued by the Medical Section to claims' examiners on August 20 calls attention to this rule and orders that it be enforced. Therefore, fees for small amounts of drugs used in minor injuries will not be approved.

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Inter-State Assembly Scheduled for Oct. 13-17 in Minneapolis

This year's International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the Public Auditorium, Minneapolis, October 13, 14, 15, 16 and 17.

The high standing of the medical profession of Minneapolis, combined with the unusual clinical facilities of its great hospitals, and excellent hotel accommodations, make this city an ideal place in which to hold the Assembly.

The Hennepin County Medical Society will be host to the Assembly and has arranged an excellent list of committees to function throughout the Assembly.

The members of the profession are urged to bring their ladies with them as a very excellent program is being arranged for their benefit by the Ladies' Committee.

A full program of scientific and clinical sessions will take place each day and evening of the Assembly, starting at 8:00 o'clock in the morning.

Approximately 85 distinguished teachers and clinicians from different parts of the United States and Canada will contribute to the program. The speakers and subjects have been carefully selected by the Program Committee.

Pre-assembly and post-assembly clinics will be conducted, free of charge, in the Minneapolis hospitals on the Saturdays previous and following the Assembly for visiting members of the profession.

Excellent scientific and commercial exhibits of interest to the medical profession will be an important part of the Assembly. These exhibits will be open to members of the medical profession in good standing without paying the registration fee.

The registration fee for the scientific and clinical sessions will be $5.00.

The list of distinguished teachers and clinicians who are to take part on the program appears on page 907 of the advertising section of this issue of *The Journal.*

Neisserian Prize Announced

The American Neisserian Medical Society announces an annual prize of $100, to be known as the P. S. Pelouze Award, to be presented to the person under 35 years of age, who, in the opinion of the Committee of Awards, has made the outstanding contribution to the control of gonococcal infections during the preceding year. Nominations for the award should be sent to the secretary, Dr. Oscar F. Cox, 475 Commonwealth Avenue, Boston, not later than March 31 of each year. The winner will be announced at the subsequent annual meeting of the Society.

The Wendt-Bristol Company

Two complete ethical stores in Columbus

51 E. State St. 721 N. High St.

for the convenience of the Physicians and Surgeons—and the many people they serve

Two Prescription Departments
maintained in a high class manner with eight registered Pharmacists

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Effective, Convenient and Economical

THE effectiveness of Mercurochrome has been demonstrated by twenty years' extensive clinical use.

For the convenience of physicians Mercurochrome is supplied in four forms—Aqueous Solution for the treatment of wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

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is economical because solutions may be dispensed at low cost. Stock solutions keep indefinitely.

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Mercurochrome is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Literature furnished on request

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As an Adjunct in the Treatment of ALCOHOLISM

ONE of the newest and most interesting uses for which Benzedrine Sulfate has been accepted by the Council on Pharmacy and Chemistry of the A. M. A. is as an adjunct in the treatment of chronic alcoholism and also in alcoholic psychoses, although best results are reported in states of intoxication in which no psychosis is demonstrable. The articles listed below represent the most comprehensive work which has been done to date in this field.

Reifenstein, E. C. Jr. and Davidoff, E.: **The Treatment of Alcoholic Psychoses with Benzedrine Sulfate**—J. A. M. A., 110:1811, 1938.

Reifenstein, E. C. Jr. and Davidoff, E.: **The Use of Amphetamine (Benzedrine) Sulfate in Alcoholism With and Without Psychosis**—N. Y. State Med. J., 40:247, 1940.

Bloomberg, W.: **Treatment of Chronic Alcoholism with Amphetamine (Benzedrine) Sulfate**—New Eng. J. of Med., 220:129, 1939.[1]

[1] *Since this report, Bloomberg has enlarged his series to 60 cases which he reported on Dec. 28, 1940, at the annual meeting of the American Association for the Advancement of Science in Philadelphia. His results in this larger series were substantially the same as those in his original report.*

ADMINISTRATION

Initial dosage should be small (2.5 to 5 mg.) and should be increased progressively until the desired effect is obtained.

IN CHRONIC ALCOHOLISM

the normal dosage used by Bloomberg was 20 mg. daily, one-half of the dose on rising and the other half at noon, but this was often adjusted to meet the requirements of the individual patient.

IN ALCOHOLIC PSYCHOSES

the normal dosage used by Davidoff and Reifenstein in institutionalized patients was 20 to 30 mg. orally or intravenously* in a single dose.

IMPORTANT! In prescribing Benzedrine Sulfate Tablets, please be sure to specify the tablet-size desired—either 5 *mg.* or 10 *mg.*

*Physicians wishing to use Benzedrine Sulfate Ampules may obtain them on direct order from us.

Benzedrine Sulfate Tablets

Brand of amphetamine sulfate

SMITH, KLINE & FRENCH LABORATORIES, PHILADELPHIA, PA.

Phi Rho Sigma Meeting Held at Lake Wawasee, Indiana

The Phi Rho Sigma Medical Fraternity, which was founded at Northwestern University 50 years ago, completed a four-day convention at the Spink-Wawasee Hotel, Lake Wawasee, Indiana, June 28. Delegates were present from all of the student chapters, representing leading medical schools in the United States and Canada. Much time was spent in the consideration of the role of the medical student in national defense, and means by which the fraternity could facilitate the flow of physicians into the armed forces. Dr. Jonathan Forman, Columbus, was re-elected president. Other officers include Dr. Ralph W. Eliott, Cleveland, re-elected secretary-treasurer after 20 years of service in that office; and Dr. Dudley M. Stewart, Toledo, member of the Grand Council.

Open New Offices

Among physicians who have recently opened new offices in Ohio include the following: Dr. Richard L. Morgan, Marion; Dr. Edward W. Sanders, Bellevue; Dr. Wayne Yoakam, Utica; Dr. H. B. Young, Gallipolis; Dr. William J. Neal, Archbold; Dr. J. Herbert Graham, Hinckley; Dr. Swen Nielsen, Elyria; Dr. C. A. Day, Utica; Dr. Benjamin Van Campen, Ney; Dr. Samuel Sonkin, West Union; Dr. R. Keith Miles, Thompson; Dr. W. C. Henderson, Xenia; Dr. Luther Pugh, Perrysburg; Dr. Wilfred Earl Allyn, Jr., Cleveland; Dr. John A. Kramer, Findlay; Dr. Evelyn Steere, Lima; Dr. E. G. Kuhlman, Toronto.

Correction

In the August issue, *The Journal* stated that Dr. Orville J. Lighthizer had opened an office in Steubenville. This was an error. Dr. Lighthizer is practicing in Ashtabula.

Nutritional Research Grant Increased

The Anheuser-Busch Company, St. Louis, has tripled its grant to the University of Cincinnati College of Medicine for nutritional research in 1941-1942, increasing its contribution from $10,000 to $30,000 to the University's biological and clinical investigations being carried on in Birmingham, Ala., under the auspices of the department of internal medicine, of which Dr. M. A. Blankenhorn is head. The investigations are in charge of Dr. Tom D. Spies, associate professor of medicine. Dr. Spies and his associates will study the part played in human nutrition by constituents of yeast. The Anheuser-Busch Company previously has given the University $15,000 in grants to aid Dr. Spies in his work.

Rules on Artificial Limbs

As part of their industrial training, prisoners in the Ohio penitentiary may be used to manufacture artificial limbs for free distribution to persons receiving poor relief, Attorney General Thomas J. Herbert held in Opinion No. 3764. Syllabus of the opinion follows:

"Relief areas are political divisions of the state within the meaning of the sections of the General Code relating to prison labor, and since the production of artificial limbs forms a proper subject for industrial training and instruction to the end that prisoners may become skilled artisans in such work, it is not unlawful for prisoners in the Ohio penitentiary to be employed and used for the purpose of manufacturing such limbs to be sold or disposed of to local relief areas for free distribution to those relief wards requiring such aid."

Delaware—Dr. G. F. Moench, health commissioner of Delaware and Union counties, took a six-week postgraduate course in public health at the University of Michigan.

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OH 9-41 Chemists to the Medical Profession · Oakland Station Pittsburgh, Pa.

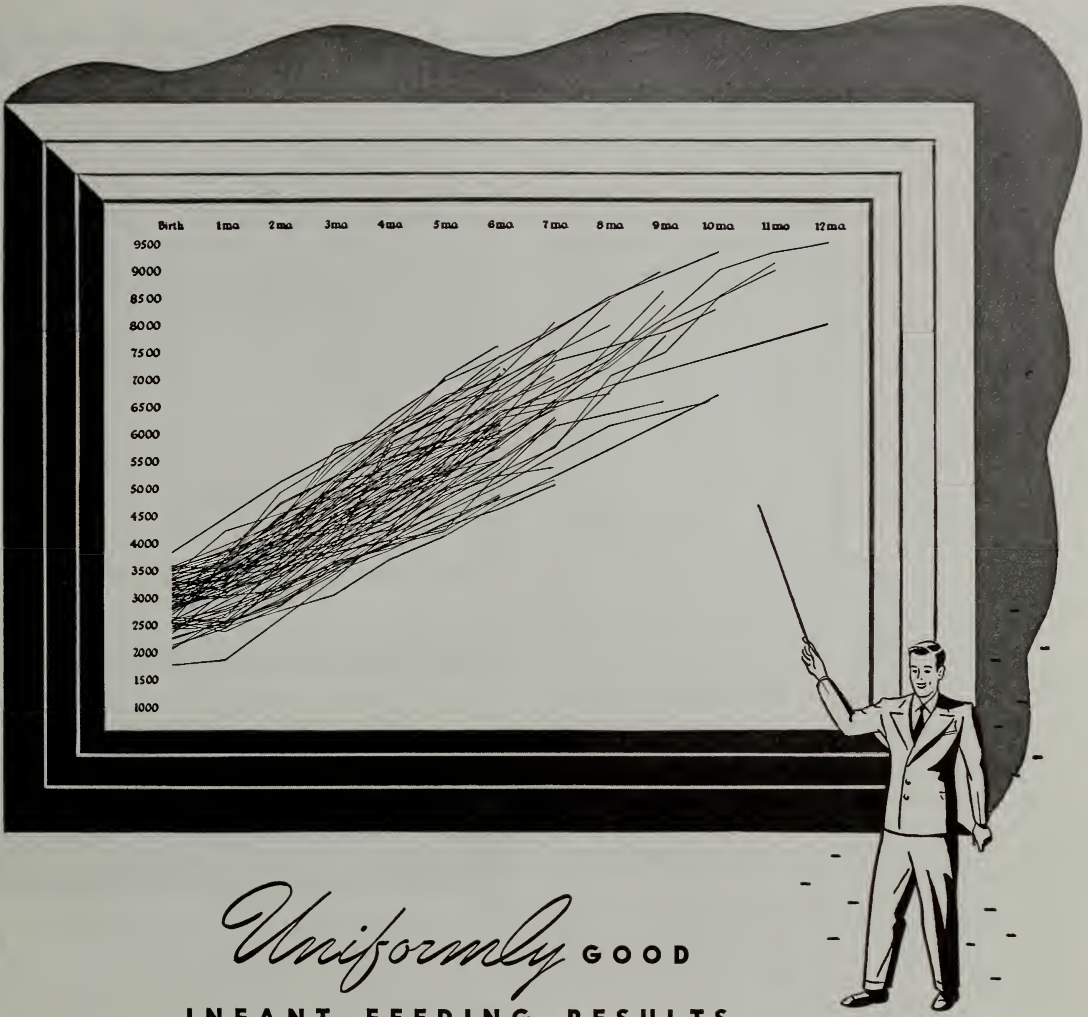
LOCATIONS! OPPORTUNITIES

Service To Aid Physicians in Securing Assistants and Placing Young Doctors Is Offered by State Headquarters Office.

Physicians who have recently completed their internships, or physicians, with experience, desiring to change locations are requested to file their names with the State Headquarters Office, Ohio State Medical Association, 1005 Hartman Theater Building, Columbus, Ohio.

Frequently, the Headquarters Office receives inquiries from physicians seeking assistants, partners, or men qualified for positions on private hospital staffs.

If physicians seeking new opportunities or desiring to change locations will file their names with that office, an effort will be made to furnish them with suggestions and at the same time render a service to members seeking assistants, etc.



Uniformly GOOD

INFANT FEEDING RESULTS

The weight curves above show the normal, uneventful progress of 75 infants fed Similac for six months or longer — not a select group, but 75 *consecutive* cases. In no instance was it necessary to change the feeding because of gastro-intestinal upset. These curves were taken from hospital (name on request) records. Similarly good results are constantly being obtained in the practice of the many physicians who prescribe Similac routinely for infants deprived, either wholly or in part, of mother's milk.

A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat is removed and to which has been added lactose, vegetable oils and cod liver oil concentrate.

SIMILAC } **SIMILAR TO BREAST MILK**

M & R DIETETIC LABORATORIES, INC. • COLUMBUS, OHIO

ACCEPTED AMERICAN MEDICAL ASS'N
SIMILAC
A FOOD FOR INFANTS
M & R DIETETIC LABORATORIES, Inc.

Senior and Junior Medical Students Given Chance for Commission

On June 18 the War Department rescinded an authorization dated May 26, pertaining to the appointment of medical students as second lieutenants in the Medical Administrative Corps and substituted other authorizations. Now junior and senior medical students who are appointed as reserve officers in the Medical Administrative Corps will be transferred to the War Department Reserve Pool and retained there until eligible for appointment in the Medical Corps Reserve or until discharged. These appointments will be made without reference to an examining board as prescribed in army regulations and corps area commanders are authorized to waive the minimum qualifications for appointment of physically qualified male citizens who have successfully completed the first two years in approved medical schools within the United States. Applications for appointment, together with a report of physical examination, should be forwarded by the dean of the medical school to the commander of the corps area in which the school is located, together with a certified statement that the applicant has completed the first two years of medical instruction and is an accredited student in the last two years of medicine at the institution.

Officers appointed under this authorization and transferred to the reserve pool will be discharged for the convenience of the government from the reserve corps on matriculation in an unapproved medical school or on failure to complete successfully the four year course in medicine or on discontinuance of their medical education or on failure to be appointed in the Medical Reserve Corps within one year after completion of the four year medical course.

American College of Surgeons to Hold Clinical Congress in Boston

The thirty-first annual Clinical Congress of the American College of Surgeons will be held in Boston, November 3 to 7, with headquarters at the Statler and Copley-Plaza hotels. The twenty-fourth annual Hospital Standardization Conference sponsored by the College will be held concurrently. About 5,000 surgeons and hospital executives from all parts of the western hemisphere are expected to gather in Boston for these meetings, the program for which will include clinics and demonstrations in local hospitals and medical schools, as well as scientific sessions, conferences, medical motion picture showings and exhibits in the headquarters hotels.

Mansfield—Dr. William B. Wild has been appointed health commissioner of Mansfield and Richland County, succeeding the late Dr. R. C. Rehder.

PROFESSIONAL PROTECTION

SINCE 1899
SPECIALIZED
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"This has been my first experience in ten years of licensed practice but it has been worth all the premiums I have paid to be able to go ahead with my work and let your Company do the worrying."

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We are completely equipped, and solicit your inquiry for these lines as well as for Pharmaceuticals, Chemicals and Supplies, Surgical Instruments and Dressings.

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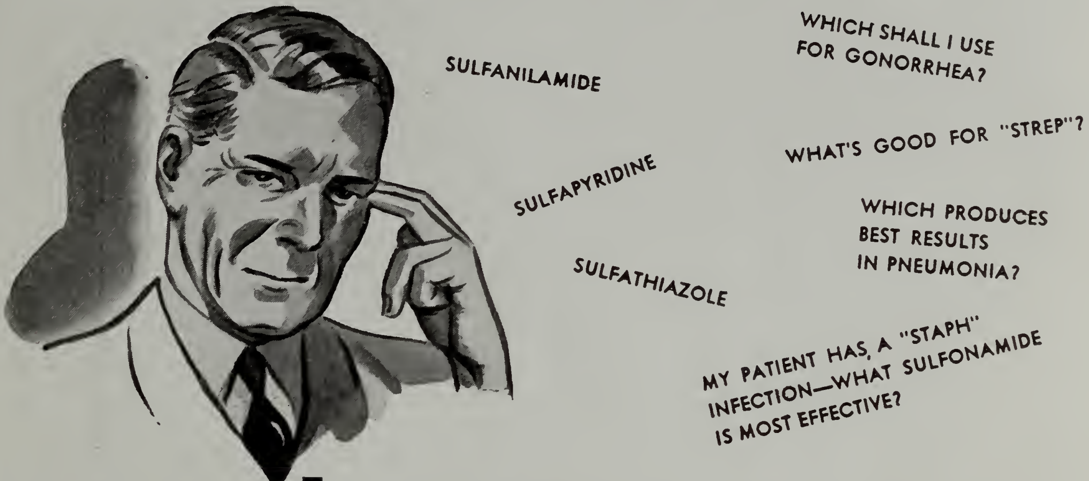
Do You Know Your Sulfonamides?


SULFANILAMIDE
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SULFATHIAZOLE
WHICH SHALL I USE FOR GONORRHEA?
WHAT'S GOOD FOR "STREP"?
WHICH PRODUCES BEST RESULTS IN PNEUMONIA?
MY PATIENT HAS A "STAPH" INFECTION—WHAT SULFONAMIDE IS MOST EFFECTIVE?

The sulfonamide compounds continue to grow in importance. Three separate drugs have been accepted by the Council on Pharmacy and Chemistry of the A. M. A. Another has been submitted for acceptance. We present on this page the "box score" on three "sulfa" drugs now in widespread use.

	Sulfanilamide N.N.R.	Sulfapyridine N.N.R.	Sulfathiazole N.N.R.
CHEMICAL NAME	(p-amino-benzene sulfonamide)	(2-sulfanilyl aminopyridine)	(2-sulfanilyl aminothiazole)
SOLUBILITY in 100 cc. of water at 37.5° C.	1480 mg.	54 mg.	96 mg.
PHARMACOLOGY Absorption	Relatively uniform and rapid.	Irregular and often poor.	Uniform—very rapid.
Distribution	In all body fluids.	In all body fluids.	In blood but poorly in other body fluids.
Excretion	Rapid.	Slower than Sulfanilamide.	Rapid.
Tendency to conjugation.	Slight.	Marked.	Moderate.
CHEMOTHERAPY ★Preferred Drug. ●Also Effective.			
Colon Bacillus			★
Dysentery Bacillus			●
Gonococcus		●	★
Lymphogranuloma Venereum	●	●	★
Meningococcus	●	★	●
Pneumococcus		★	★
Staphylococcus		●	★
Streptococcus	★	●	
HOW SUPPLIED BY SQUIBB Tablets	5 grain in bot. of 100, 500, 1000. 7½ grain in bot. of 25, 100, 1000.	0.5 gram in bot. of 50, 100, 1000.	0.5 gram in bot. of 50, 100, 500, 1000.
Powder	4 oz. Rx. bottle.	5 gram vials.	
Crystals	1.0 gram ampuls, box of 5 and 25.		5 gram vials.
Capsules		0.25 gram in bot. of 50, 100, 1000.	

Specify SQUIBB Sulfonamides

When you think of SULFONAMIDES . . . think of SQUIBB

Invitation from Pennsylvania

Dr. Walter F. Donaldson, secretary of the Medical Society of the State of Pennsylvania, extends a cordial invitation to members of the Ohio State Medical Association to attend the 91st Annual Session of that Society, October 6-9, at the William Penn Hotel, Pittsburgh. A comprehensive program of lectures, round-table conferences and exhibits is being arranged. In addition to the scientific section meetings and a series of round-table conferences, lectures will be presented by the following guest speakers: Drs. Louis A. Brunsting, Albert M. Snell, Virgil S. Counsellor, and William L. Benedict, Rochester, Minn.; Samuel W. Clausen, Rochester, N. Y.; Joseph A. Johnson, Detroit, Mich.; Meredith F. Campbell, Maximilian A. Goldzieher, and Charles Gordon Heyd, New York City; Charles A. Waters, Baltimore, Md.; Edward J. Stieglitz, Bethesda, Md.; Edward S. Welles, Saranac Lake, N. Y.; Leland S. McKittrick, Boston, Mass.; James L. Reycraft, Cleveland, Ohio; Charles A. Doan, Columbus, Ohio; Thomas C. Galloway, Evanston, Ill.; and William Mather Lewis, Selective Service Director for Pennsylvania.

Toronto—Dr. Edward H. Rea has announced his retirement after 45 years of medical practice.

Program for Training Volunteer Nurses' Aides Announced

U. S. Director of Civilian Defense F. H. LaGuardia, has announced a program for the training of 100,000 volunteer Nurses' Aides during the next 12 months, in collaboration with the American National Red Cross and the major hospitals of the country. The program is in preparation for any expansion in hospital beds which may be required during the national emergency, he stated, and if nursing facilities of civilian hospitals are seriously depleted due to the demands of military and naval establishments and the increasing needs of public health and industrial hygiene services.

The training program for volunteer nurses' aides is designed to expand the effectiveness of the trained nurse in hospitals, clinics and field nursing services by supplying her with intelligent assistants who can work under her direction.

The curriculum of instruction has been prepared by the Medical Division of the Office of Civilian Defense, the American National Red Cross and the Federal Security Agency. Eligibility is limited to women between the ages of 18 and 50 who have had at least a high school education or its equivalent and who are physically fit. The course will provide 80 hours of inten-

It makes their regular check-ups "fun" by giving youngsters some wholesome CHEWING GUM

It's such an easy, thoughtful gesture to always offer your little patients some delicious Chewing Gum while they're waiting or when they leave the office. They just love it — and it makes a big hit with adults, too. And for such a small cost this one, friendly, little act goes a long way in winning extra good will and affection. Besides, as you know, the chewing is an aid to mouth cleanliness as well as helping to lessen tension. Enjoy chewing Gum, yourself. Get a good month's worth for your office today.

There's a reason, a time and place for Chewing Gum

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BIRTCHER PRESENTS THE CHALLENGER *Masterpiece*

We will be pleased to demonstrate that the "Challenger Masterpiece" is as distinguished in performance as in appearance.

BENEATH the sleek walnut cabinet of the new "Challenger Masterpiece" is the last word in super-powered precision engineering, so sturdily constructed, Birtcher offers a two-year *unconditional* guarantee.

So simple to operate, too. Just one switch control. And note the outlets on *both sides*... leaving control panel clear.

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tive instruction in a period of seven weeks. The first half of the course will be given in the local Red Cross chapter house in collaboration with local hospitals and nursing organizations. This will constitute the probationary period and, will require two hours of instruction daily on five days a week for four weeks.

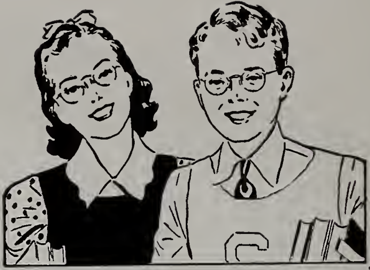
The second half of the course will consist of supervised practice in a hospital which has been designated by the Office of Civilian Defense and the Red Cross as a training center. The American National Red Cross will assist the hospital to provide competent instructors and nursing supervisors. Those who complete the course will be enrolled in the Volunteer Nurses Aid Corps of the American Red Cross.

The Office of Civilian Defense and the American National Red Cross will provide for this continuing service by arrangement with local hospitals and field nursing agencies. For this purpose, the Red Cross will maintain a Placement Bureau which will allocate volunteer nurses' aides to the following type of nursing service: Hospitals and clinics, visiting nurse (home visiting) agencies, health departments, school health services and industrial hygiene clinics. Applicants may enroll at the Red Cross chapter house and the course will begin in each locality as hospital arrangements are completed.

Sales Tax Receipts Soar

Receipts derived from the sales tax in Ohio during the first six months of this year soared to an all-time record, jumping 27.1 per cent over the corresponding period of 1940, according to a recent report of the Treasurer of State, Don H. Ebright. Receipts accruing to the state from this source at the close of business reached the sum of $31,107,053.73 as compared with $24,472,873.70 last year, a gain of $6,634,180.03. During the period every county in the state showed an increase in receipts over the first six months in 1940. Counties showing the largest increase are those in which at least a part of the rearmament program is being carried on. Ravenna, the county seat of Portage County, showed an increase of 58.4 per cent. Other large increases included: Mahoning County, 36.6 per cent; Summit County, 38.2 per cent; Trumbull County, 44.2 per cent; Montgomery County, 33.5 per cent. Sales tax receipts from the sale of motor vehicles were 52.2 per cent higher than the first six months of 1940. During the first half of 1941, a total of $588,163.30 was paid to applicants who asked for redemption of sales tax receipts which had been saved for civic, charitable and fraternal organizations.

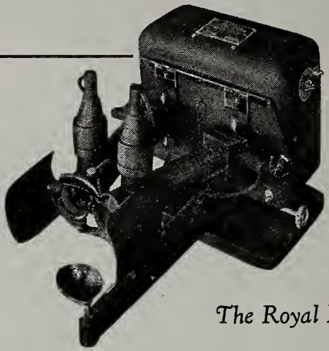
Gallipolis—Dr. Charles E. Holzer is vice-president of the Friends of the Land, a national organization interested in the conservation of the country's natural resources.



A BACKGROUND OF

EYE COMFORT

FOR YOUNG AMERICA



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HUNDREDS of Eye Physicians have proved in their own practices the value of Rotoscope Orthoptic Training. Especially noteworthy are the good results obtained with young patients whose faulty visual habits have not become firmly entrenched. . . . The Royal Rotoscope embodies facilities for every possible orthoptic technique and yet its operation may be mastered in a short time. A simple step-by-step procedure for practically every type of case is included in the manual which accompanies each instrument.

We'd appreciate an opportunity to demonstrate the Royal or either of the two other Rotoscope models in your office. Just write or telephone your nearest W-H house.

The **WHITE HAINES**
Optical Company

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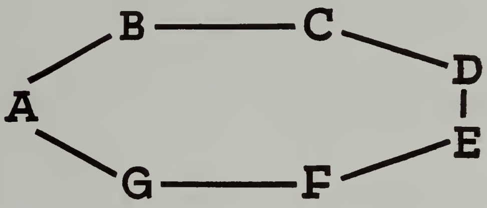
Formula for a Square Meal

FROM BIRTH THROUGH BOTTLE FEEDING

- **A** Liberal protein content
- **B** An adjusted protein (added gelatin)
- **C** An adjusted fat
- **D** Two added sugars
- **E** Added vitamin B complex
- **F** 4 times as much iron as cows' milk
- **G** Not less than 400 units of vitamin D per quart



Baker's MODIFIED MILK

Like a good "meat-and-potatoes" meal set before a hard-working man, Baker's MODIFIED MILK satisfies the urgent demands of the growing infant. It's a sustaining food - doing its hearty share of building tissue, forming bone, producing energy. Fortified at seven strategic points, Baker's offers extra quantities of important food substances, vitamins and minerals - *adjusted* for ready acceptance by the infant digestive system.

A powder and liquid modified milk product especially prepared for infant feeding. Made from tuberculin-tested cows' milk in which most of the fat has been replaced by animal, vegetable and cod liver oils, together with lactose, dextrose, gelatin, vitamin B complex (wheat germ extract, fortified with thiamin), and iron ammonium citrate, U.S.P. Not less than 400 units of vitamin D per quart. Four times as much iron as in cows' milk.

A food for your most difficult feeding cases, doctor - and for your huskiest babies. Let us send you full information.

OTHER BAKER PRODUCTS

MELCOSE

Liquid only

A specially prepared infant food of tuberculin-tested cows' milk, in which the fat has been replaced by vegetable and cod liver oils, modified by the addition of dextrin, maltose, dextrose and iron ammonium citrate. For general infant feeding, as a supplement to and in place of breast milk, at birth and throughout the bottle-feeding period. A low cost milk, completely prepared. Write for literature.

MELODEX

A mixture of maltose and dextrins prepared by enzyme hydrolysis of cereal starch. (An easily assimilated carbohydrate, for the modification of fresh, evaporated and powdered cows' milk for infant feeding.) MELODEX is easily digested and readily absorbed. It permits a wide range of flexibility in the modification of cows' milk, and may be given in liberal amounts without producing intestinal disturbances in normal babies. Valuable for increasing the caloric content and improving the flavor of fresh whole milk for undernourished children, nursing mothers and convalescents. Very economical. Three formulas – A, B, C.

THE BAKER LABORATORIES
CLEVELAND, OHIO
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Buckeye News Notes

Bridgeport—Dr. W. B. Baily, Belmont County health commissioner, has resigned to accept an appointment with the U.S. Public Health Service.

Cincinnati—Dr. and Mrs. Daniel C. Handley observed their fiftieth wedding anniversary recently.

Cincinnati—Dr. Lynne E. Baker, medical director of the Hamilton County Tuberculosis Sanatorium has been appointed head of the tuberculosis division of the Department of Health of the State of Florida.

Cincinnati——Dr. Cecil Striker, president of the American Diabetes Association, discussed "The Control of Diabetes" at a meeting of the Dayton District Institute of Nutrition for Defense.

Cleveland—Dr. Charles T. Dolezal, assistant professor of medicine, Western Reserve University School of Medicine, has been appointed assistant superintendent of Cleveland City Hospital, succeeding Dr. Maynard W. Martin, who resigned to become assistant director of St. Luke's Hospital, New York.

Dayton—Dr. F. L. Shively is chairman of a committee which is studying plans for the establishment of a medical business bureau in Dayton, similar to the Columbus Bureau of Medical Economics.

Dover—Dr. H. E. Reed, who has been on active duty with the Medical Corps of the U.S. Navy, at Great Lakes, Illinois, has returned to private practice.

East Liverpool—Dr. John A. Fraser spoke on "The Medical Profession", at a meeting of the Lions Club.

Elyria—Dr. Bernhard Chomet, assitant pathologist at St. Francis Hospital, Toledo, has been appointed pathologist at Elyria Memorial Hospital. He succeeds Dr. Maurice Rosenzweig, who resigned to become superintendent of a hospital in Boston, Mass.

Findlay—Dr. Thomas F. Betts has been commissioned as captain in the Third Infantry Regimental Medical Detachment of the Ohio State Guard.

Lima—Dr. Harold Bruckner, Ft. Wayne, Indiana, has been appointed superintendent of the Lima District Tuberculosis Hospital.

Sidney—Dr. Harry Wain, health commissioner of Shelby County, reviewed the work being done by the county dental clinic at a meeting of the Rotary Club.

St. Marys—Dr. Guy E. Noble, Third District Councilor of the State Association, addressed the St. Paul's Men's Association on "The Medical Profession's Part in the National Defense Program."

Verona—Dr. William I. Christian recently completed 50 years in the practice of medicine.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 October, 1941 No. 10

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Diabetic Neuritis

CHARLES D. ARING, M.D.

OPINIONS differ as to what constitutes neuritis. In some cases with minimal clinical signs considered to be sufficient to make the diagnosis, histological study of a nerve reveals no abnormality.[1] This being so, the incidence of neuritis in diabetes is made even more uncertain by remarkably divergent estimates (0.6 per cent to about 50 per cent).

PATHOGENESIS

The situation in regard to the pathogenesis of diabetic neuritis is not clear, and rests chiefly on clinical inference. In spite of the frequent association of arteriosclerosis, many neurological lesions of diabetes cannot be explained by this factor. Arterial disease has its major incidence in the fourth to the sixth decades, whereas loss of reflexes is more common in younger diabetics (see symptoms and signs). Mere excess of sugar would not seem to be the sole cause, for if it was, diabetic neuritis should be commoner than it is. Some think, however, that sugar holds the same pathogenic position as does alcohol in respect of alcoholic neuritis. There are a few factors in favor of the hypothesis that vitamin deficiency may play a part in the etiology of diabetic neuritis. There is a close relationship between vitamin B1 and carbohydrate metabolism. There is some resemblance between diabetic neuritis and neuritis associated with other diseases which are thought to be due to nutritional deficiency. Many diabetics subsist on diets which are low in vitamins.

Slight nervous symptoms may occur in any form of diabetes, but the more severe nervous symptoms are met with chiefly in the chronic forms and sometimes in mild cases; usually, but not always, the patients are over 40 years of age. The severe nervous complications are very rare in young patients suffering from an acute or severe form of the disease.

The Author

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SYMPTOMS AND SIGNS

Diabetic neuritis as observed in hospitals is of necessity more severe than that seen in private practice. In patients with diabetic neuritis from both groups a study has been made[7] of the age-incidence for loss of knee jerks and found to be as follows: — under 25 years, 81 per cent; under 30, 76.9 per cent; over 30, 40 per cent. As in tabes, the Achilles jerks are usually lost in diabetes before the knee jerks.

Jordan[2] studied 226 cases of neuritis in patients with diabetes, not obviously due to any other conditions. He classified diabetic neuritis as follows:

1. Hyperglycemic (34 cases), in which the

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*An address delivered during the refresher course in diabetes, Cincinnati General Hospital, April 2, 1941.

symptoms disappeared within a few days after giving diabetic treatment.

2. Circulatory (27 cases), included the patients with circulatory deficiency in the legs.

3. Degenerative (45 patients), with mild neuritic symptoms and signs which began insidiously and progressed slowly over a period of months or years.

4. Neuritic (120 cases), patients with severe neuritis in whom the onset was relatively acute and improvement occurred only after weeks or months of treatment.

Every person with diabetes, who has a pain in the foot is not suffering from neuritis. Severe forms of true diabetic neuritis are not very common. However, the diabetes may be discovered because occasionally, the first symptom to which the patient pays any attention may be pains in the legs. A typical instance of severe, diabetic neuritis may be cited.[5]

> "A man of about 40 years of age, has had diabetes as judged by characteristic symptoms, for two years before the diabetes was discovered. The discovery was brought about because of the development of pain in the legs. When he first comes under observation he has had symptoms of neuritis for eight months, and now he has marked atrophy of the muscles of the legs, and such weakness of the anterior thigh muscles as to be unable to extend the legs at the knees. He is unable to stand or walk. The appreciation of vibration is lost in the lower extremities, and no tendon reflexes can be elicited from them. The total protein content of the cerebrospinal fluid is 150 mg. per cent".

Symptoms in the majority of cases of so-called diabetic neuritis are chiefly sensory in nature. With the onset there is a dull, burning, gnawing pain in the legs and feet, which is ever so more severe at night, and is sometimes accompanied by cramping in the calf muscles. Patients usually must walk to quiet this type of pain. These symptoms may be considered as mild, but they are enough to prevent sleep. Muscle tenderness is common, so that bed clothes cannot be borne on the legs. Lancinating pain in machine gun-like bursts, such as experienced in tabes dorsalis, has been described in diabetic neuritis but is rare.

It is usual to find the appreciation of vibration diminished in the soles of the feet and the nails of the toes, and if the disease has progressed, in the malleoli and tibiae. There may be impairment also of touch, pain, and temperature, but vibration seems to suffer particularly. A variety of subjective sensory abnormalities have usually been noted, tingling, pricking, "pins and needles", burning, numbness and deadness referred particularly to distal segments. Tendon reflexes may be diminished or abolished. Muscle atrophy and weakness of any degree seldom occur except in the severe case which is not common, now and again ataxia is evident—a "pseudo-tabetic" sign. Trophic disorders due solely to diabetes are somewhat exceptional. Since arterial disease and gangrene have their major incidence in the fourth to the sixth decades, whereas loss of reflexes is more common in younger diabetics, we may infer that in later life trophic lesions are more likely to depend on vascular than on neural factors. Arteriosclerosis would not seem to be the principal cause of the neuritis, because the type of neuritis observed most frequently in diabetics, with characteristic darting pains occurring at night and relieved by exercise, is not encountered frequently in non-diabetic patients.

Neuritis in the arms is rare. A diabetic variant assumes a mononeuritic form, involvement of the obturator, anterior crural, ulnar, external cutaneous, sciatic or other nerves having been reported by various writers. Cranial neuritis has been recorded in diabetes, the following nerves are most frequently involved, one or more of the ocular nerves, the seventh and eighth. Palsy of the palate and pharynx has been reported by some observers. Diabetes may account for some of the recurrent varieties of cranial nerve paralysis. Neuroretinitis occurs not infrequently. The pupils may be small and sluggish in their reactions, or these can disappear. In one series[4] of 120 cases of diabetes the pupils were abnormal in 17 per cent. The tendency for the pupils to become small, and to develop sluggish reflexes with increasing age must be taken into consideration. "Non-syphilitic Argyll Robertson pupils" have been observed. Paralysis of the bladder is noted occasionally.

Jordan[2] has found the total protein in the cerebrospinal fluid considerably elevated in diabetic neuritis. In 40 patients a total protein above 50 mg. per cent was noted in 22 cases, and above 60 mg. per cent in 15 cases. The cell counts in these fluids were normal.

There is some resemblance of the symptoms of diabetic neuritis to those of tabes, in fact the disease has been occasionally called "diabetic pseudo-tabes". The signs which may occur in both diseases are the loss of Achilles and knee reflexes, pains in the legs, impairment of sensation, sexual impotence and perforating ulcers. The pains in the legs in diabetes are usually of a dull, aching and gnawing character, and the typical shooting pains of tabes usually are not found, but in a few cases the description of the pains given by the diabetic patient has corresponded to the sharp, stabbing, momentary pains of tabes.

The diagnosis from true tabes is usually easy. The difficulty occurs chiefly in cases in which thirst and diuresis have been slight or absent, and an examination of the urine has not been made. In diabetes tenderness of the calf muscle is a common complication, but not so in tabes, in fact in the latter muscular and tendon analgesia are the rule.

PATHOLOGY

Lesions may be found in the nerve trunks with interstitial reaction in the peri- and endoneurium. Changes may be found in the dorsal roots and columns and also in the ventral horn cells. Changes are occasionally more marked in the intramedullary course of the posterior root.

The nerves from the lower part of the legs show greater damage than the nerves from the pelvic level. The greater the vascular disease in diabetes the greater the nerve damage, though nerves have been examined from patients who did not have diabetes but did have arteriosclerosis and they do not show this pathological change. This is another indication that vascular disease is not the sole cause of neuropathy in diabetic patients.

TREATMENT

It has been long known that the longer the duration of imperfectly controlled diabetes, the more frequent is the involvement of the nervous system. Pavy[3] thought that neuritis does not develop when the sugar is kept down by appropriate means. However, control of the diabetes does not appreciably influence the course of the neuritis, once it has occurred. It seems hardly necessary to note that the diet should contain liberal amounts of the vitamins.

The use of heat delivered by an electric pad or by warm baths, particularly at night, is the single most useful agent in the relief of pain. Burns are to be guarded against. Liberal use of acetylsalicylic acid, occasionally bolstered with codeine is a useful adjunct. Ointments, particularly those containing cocaine applied to the painful and tender parts, are said to be of service.

Weakness and pain may result from the pressure of bed clothes. A cradle should keep this weight off of the legs and feet. If paralysis is present the limb must be supported by padded splints in a neutral position. As for all forms of neuritis that cause weakness, bed exercises are a necessity after the period of extreme pain has passed, and even during this period if judiciously applied. The splints must be removed during these exercises. Gentle passive movement of all of the joints of the involved limb is a requisite to prevent contracture and fixation. The patient (or his relative) should be encouraged to perform these movements several times a day. The severity of pain of the joints which results on passive movement, depends somewhat on the fixation that has developed, and it forms a rough index for the amount of physiotherapy that is required. Obviously no interference with the mobility of joints should be allowed to develop. Nursing service and funds are usually not sufficient, in the hospital or out of it, to allow for adequate care of the limbs of patients suffering from neuritis, and the patient might as well be informed of this fact. Amateur massage of the muscles is unnecessary and likely to be harmful. If a skilled physiotherapeutist is available the patient or his relatives might be instructed how to gently stroke and kneed the muscles, the rigorousness of these maneuvers depending on the severity and stage of the disease. Massage and passive movement must be extremely gentle during the severe and early periods of neuritis.

Leg crossing should not be allowed in diabetics with neuritic tendencies because of the vulnerability of the peroneal nerves. The use of alcohol or tobacco by these people is thought to be unwise. The occurrence of infections must be guarded against, and if one occurs it must be eliminated as quickly as is feasible.

We have not had the opportunity to evaluate the oral use of large amounts of sodium chloride (30 grams or more per day) in the treatment of diabetic neuritis. This therapy is said[6] to produce dramatic results, although diarrhea may result therefrom.

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Vitamin Deficiencies

One of the early symptoms of riboflavin deficiency in humans are lesions about the lips. The cheilosis is characterized by pallor of the mucous membranes at the angle of the mouth, followed by maceration and superficial transverse fissures. Seborrheic accumulations around the nose, eyes and ears are also observed. Recognition of this condition is constantly increasing and cases are reported from all parts of the country. It is a deficiency which is conceivably very prevalent and should be looked for. Riboflavin deficiency is often associated with other deficiencies.

The requirement for riboflavin seems to be about the same in magnitude as the amount of thiamin needed. Infants require about 1 mg. and adults about 3 mg. each day.—F. W. Schultz, M.D., Chicago, Ill.; Texas S. Jour. of Med., Vol. XXXVII, No. 4, August, 1941.

The Clinical Use of Stilbestrol

EMIL H. ADLER, M.D. and BESSIE G. WIESSTIEN, M.D.

WE have ever been hopeful of a preparation that would simplify the treatment of the menopausal patient; that is, a drug that would take the place of the injections now in vogue; that would be effective orally; that would be superior to what we are now using and would be non-toxic and inexpensive. A drug that promised to fulfil most of these requirements has been reported in the literature of the past few years. Its only drawback has been its toxicity, which is being questioned.

In about 1933, while investigating the relationship of carcinogenesis to estrogenic activity, Cook and Dodds[1,2] discovered that this synthetic drug, which they called diethyl stilbestrol and later shortened to stilbestrol, possessed estrogenic properties, even though chemically it was unrelated to the estrogens. Dodds later found the dipropionate of diethyl stilbestrol to be less toxic and more effective than the original,[3] and it is the use of this form of the drug that we are reporting upon here. Stilbestrol was found to be very effective when given either intramuscularly or orally.[2] Orally, it was found to be two to three times as potent as the estrones, one milligram being equivalent to from 20,000 to 25,000 international units of estrogen.

The toxicity of the drug has been found to vary widely in animals. Loesser,[2] noted damage to the liver, kidneys and adrenals of rats to whom large doses were administered. Hamm[4] and his coworkers, working upon dogs, observed disturbances in the myelogenic system, namely agranulocytopenia and anemia. Seyle[4] produced necrosis of the liver in mice. Lacassagne was able to demonstrate carcinogenesis in mice to whom the drug was administered. Teague,[4] however, using small doses produced no liver damage in rats, and Grab[4] points out that more than 1000 times the effective dose is harmless and that therefore its toxicity can be mimimized since a toxic effect is only observed where excessive doses have been used.

TOXIC SYMPTOMS VARY IN DEGREE

In the human, Shorr, Robinson and Papanicolaou[5] produced toxic symptoms of central origin that varied in degree and were independent of the dosage used, but they were unable to find any evidence of liver damage in so far as could be determined by the various chemical tests for liver function. The toxic symptoms they produced were: nausea, vomiting, abdominal distress, vertigo, thirst, paraesthesias and cutaneous rashes. MacBryde, Freeman and Loeffel,[6] Buxton and Engle,[7] also performed liver function tests, blood chemistry analyses and studies of the urine on patients who had received large doses of stilbestrol and found no evidence of kidney or liver damage even though toxic symptoms developed in some of their cases.

Upon clinical trial, Payne and Muckle[8] treated 68 patients with 69 per cent of complete relief and none of these suffered ill effects other than a mild gastro-intestinal upset. They did not exceed the dose of 1 milligram per day orally. On the other hand, Salmon and Geist[1] treated 45 patients with larger doses and 64 per cent of their patients developed one or more of the following toxic effects: nausea, vomiting, vertigo in 25 per cent, diarrhea or pain. None of these showed any evidence of liver damage.

Almost all investigators[1,2] are now in agreement that the menopausal symptoms are usually promptly relieved within two to four days, using one milligram of the drug per day; and that the vaginal smear changes from a menopausal type, in which small round epithelial cells and leucocytes predominate, to a cornified type of smear, showing large clear epithelial cells and no leucocytes; and that this change usually takes place within seven days. Thereafter the patients can be kept more or less symptom free and the smear kept at a "cornified" level on a much reduced dosage of from 0.1 to 0.5 milligrams per day. The menopausal symptoms are likely to return 14 days after discontinuing the drug and the vaginal smear will then return to its former menopausal type. Of course each patient's response will vary and the treatment must therefore be individualized.

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Read before the Cleveland Mt. Sinai Hospital Medical Society, February 13, 1941.

Stilbestrol has the same effect on the breasts, uterus and other organs as do the natural estrogens. Repeated endometrical biopsies have shown that it will produce a "proliferative" type of endometrium. As a result of this, uterine bleeding may occur at any time during the administration of the drug; or withdrawal bleeding when the drug is discontinued. This is usually very moderate and should cause no alarm if it does occur.

In our patients the drug was administered orally in doses ranging up to one milligram per day. While this dosage has been somewhat small when compared to that reportedly used by some others, it probably explains the paucity of side effects experienced in our cases. Most investigators now agree that small doses such as were used by us, relieve the menopausal symptoms about as rapidly as the larger and give better results because side effects are less likely to occur.

CLINICAL MATERIAL

Diethyl-stilbestrol dipropionate was used in 40 patients. Eight of these did not return after their first visit. The others were observed for a period covering three weeks to seven months. Five were post-deliveries, in whom suppression of lactation was desired for various medical reasons. Excellent results were obtained in all five without any untoward or toxic effects. The remaining 27 showed ovarian deficiencies. Two, aged 16 and 18, had[4] delayed menarche; and two, aged 23 and 26, were secondary amenorrheas; the remaining 23 were menopausal. Twelve of these 23 patients (aged 35 to 51 years) were natural menopause; the other 11 had had surgical operations (aged 30 to 51 years). All but seven had received estrogenic therapy other than stilbestrol previously. Two strengths were used 0.1 mg. and 1 mg.

SYMPTOMS

Symptoms in order of frequency were mild to severe vasomotor discomforts; insomnia, or some form of sleep disturbance; headache; occipitocervical tenseness; irritability; emotional and psychic disturbances — as crying spells, weird depressing thoughts, confused thinking, poor memory; gastrointestinal upsets and arthritis. Two of the young castrates complained of a feeling of being "choked" when awakened during the night; three made a point of saying that they had the sensation of "weakness" and "quivering" inside. Patients were carefully watched for any objective toxic manifestations; they were asked to tell how they felt, being careful not to give any leads to the majority of patients.

RESULTS

Menopause: Good results, meaning relief of the complaints which brought them to us, were had in 16 or 69.5 per cent; and fair results in 5 or 21.7 per cent; doubtful results in 2 or 8.1 per cent. One, of these two, had kraurosis vulvae, and in the other one the result was difficult to estimate because of her general behavior.

Amenorrheas: Definite estrogenic effects were noted in three of the four amenorrheas. All showed increased pigmentation of the areolae, some breast soreness and enlargement, a change in the mental attitude towards the opposite sex and an increase in well being.

Toxicity: Four patients reported feeling nauseated on the first or second day without vomiting, which disappeared on continuing the medication. One of these four gave the history of constipation and abdominal cramps long before the medication was started. She was advised in regards to her constipation; the drug was continued without a recurrence of nausea, and with the establishment of the much desired first, second and third periodic uterine bleeding. (Endometrial biopsies were not obtainable; bleeding was probably estrogenic). Another one complained of loss of appetite, nausea, and pain in her pharynx radiating down the right side to the pit of her stomach, which was relieved she said after discontinuing her medication. After two weeks rest, with a return of menopausal symptoms, medication was again resumed.

The fifth patient, who showed toxic effects, is described in one of the following case reports.

CASE REPORTS

Case 1: Mrs. Bertha P. Age 49 years. Admitted to the endocrine clinic with a history of hot flashes, nervousness, occipital headaches and dizziness. Progynon B (2000 R.U.) gave her moderate relief. In November, 1940, after a period of three weeks without Progynon B., her symptoms returned and she was started on 1 mg. stilbestrol daily, which was continued intermittently until January 20. She was relieved of all her symptoms after four days, and showed a follicular smear on the tenth day. An attempt to decrease the dosage to 0.2 mg. daily was accompanied by a return of symptoms and uterine bleeding. When she was out of medicine, symptoms returned promptly. From January 6 to January 20 she received 1 mg. daily; on the 14th she reported having had a spell of nausea, hematemesis, staggering, blindness, headache, generalized numbness and hot flashes which lasted several days, and which cleared up in spite of her continuing on with a daily 1 mg. The question arises in our minds as to whether this spell was evidence of drug toxicity since it cleared up while still taking the medicine, and since she tells us that she had a similar, although less severe episode, exactly one year ago before stilbestrol was administered. This patient had a total of 60 mg. Blood and urine examination following this episode did not reveal any evidence of liver damage or agranulocytosis.

Case 2: Mrs. Dorothy H. Age 42 years. History of having had a supracervical hysterectomy and right salpingo-oopherectomy in November, 1939. First seen in the endocrine clinic December 12, 1940, with complaint of profuse sweats, flushes and insomnia for past six months. Vaginal smear was negative. Patient was put on 1 mg. stilbestrol nightly. When she reported January 9 she said that she had been relieved of her symptoms after the second pill; the smear was follicular. Without any further medication her relief continued up to January 15 at which time her smear showed slight regression and again she was given 1 mg. nightly with relief. She was out of medicine from January 25, and when she was seen February 10 there was a slight return of flushes and a sort of substernal and epigastric discomfort, which she had when first seen and which was relieved with the other complaints. Smear regressed almost to a negative phase.

SUMMARY AND CONCLUSION

1. Diethylstilbestrol dipropionate was used and the effects observed in 32 patients, 23 of whom were menopausal.

2. Relief of symptoms was obtained in 69.5 per cent of the menopausal patients; nausea was reported in five of the entire group observed, or 15.6 per cent. In only one did it occur on other than the first or second day, and then in conjunction with other symptoms which may be questioned as "toxic" manifestations of the drug.

3. Diethylstilbestrol dipropionate is strongly estrogenic as evidenced by the change in the vaginal smears and the relief of menopausal symptoms.

4. In our hands, small doses (0.1 mg.-1 mg.) have produced maximum benefits with a minimum of "toxicity".

5. Further careful observation with its use is recommended until more definite proof of its so-called "toxicity" is shown.

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The cost of taking a man who has tuberculosis into military service is around $10,000 per man. —Ramsey Spellman, M.D.

The Dynamic Enteropathies

FRANK A. RIEBEL, M.D., COLUMBUS, OHIO

How many times the radiologist, having been referred a case with typical gastro-intestinal symptoms, can find nothing more of interest than some hypotonicity, and perhaps notes that the barium tends to form puddles in the small bowel! These findings uninterpreted are depressingly futile.

Slowly though, the picture is beginning to unfold. It is well known that in this country, sub-clinical varieties of pellagra, sprue, scurvy, and beri-beri occur; and now it has been shown by several workers that the intestinal changes common to these states leave tell-tale clues on the X-ray film.

Since in these states there are two factors, irritability of the mucosa, and an alteration of neuromuscular control, it naturally follows that the intestine may be either hypomotile or hypermotile. Nevertheless, according to Weingarten and Adlersberg, the radiological changes are rather easy to pick up. They consist of a puddling or an irregularly smudged filling of the coils with deep spasms and peristaltic contractions. The calibre may vary in either direction, the mucosa being thickened in the narrowed strips and abolished in the dilated ones.

According to Kantor, another deficiency state, chronic idiopathic steatorrhea, also exhibits these dilated loops, and since there is a complete loss of the valvulae conniventes, he picturesquely calls it the "moulage sign".

These deficiency states must, of course, be differentiated from regional ileitis, that massive granulomatous and ulcerative lesion which usually causes a beautiful picture of unadorned string-like stretches of intestine with skip areas approaching the normal.

From this compressed resumé of the newer roentgenology of the small intestine (which, incidentally, has been developed almost entirely by the clinician, and not the radiologist), it appears to behoove all of us to pay closer attention to that area between the duodenal cap and the ileo-colic valve. A radiologist who now treats this long stretch as a "skip area" is badly outdated.

15 West Goodale St.

A college president who would never tolerate a contaminated water supply on his campus must learn not to permit an open, broadcasting case of tuberculosis loose among his young people. Sneaking tuberculosis must be painted as the crippler and killer it is, more to be feared than the sporadic, dramatic visits to the campus of such well publicized maladies as influenza, measles or mumps.—Charles E. Lyght, M.D.

The Role of Genetics in Cancer Research

F. BLANK, M.D.

CANCER research entered at the beginning of the century on a wholely new phase, owing to

(a) The rediscovery of the laws of genetics.

(b) The study of spontaneous and transplantable tumors in animals from the angle of heredity.

(c) The discovery of cancerogenic agents opening the door to the experimental study of induced tumors biologically controlled. Hormone research is here an important section.

(d) Increased knowledge of the biological connection between irritants on the one hand and the differences in individual reaction on the other hand.

How are the factors connected and why is each of them important for the study of the cancer problem?

One of the basic problems puzzling man for hundreds of years certainly is the question: Is cancer hereditary? Striking family histories were known with an excess of cancer. They became even famous when cancer so highly accumulated in outstanding families as e.g. in that of Napoleon Bonaparte.

But it is evident that no proper approach to the problem of cancer and heredity could be made and, of course, no solution could be found without knowledge of the principles governing hereditary transmission in general.

It was but in 1900 that these principles, the laws of genetics, discovered by Gregor Mendel as early as in 1866 were rediscovered independently by Hugo de Vries in Holland, Carl Correns in Germany and E. Tschermak in Austria.

A new branch of science has been developed since then, the importance of which cannot better be demonstrated than by giving some facts of the role which genetics plays in modern cancer research.

Indeed, the place of the implications of genetics for this field is an excellent example alike of the value and aim of the study of heredity. For no serious discussion of that malady could be carried on at present if the subject were not included.

This statement may cause surprise to some people who still oscillate between the two common ideas: namely, that the specific cause of cancer will be discovered any time and that therefore no place will be left for a genetical background in cancer causation. Or, on the other hand, when there is experience of generations of cancer patients in a number of "cancer families" giving so much evidence, heredity is taken as the natural cause and no further discussion seems necessary, because there no puzzle remains. In other words, these different views oscillate between the purely **extrinsic** cancerogenic factors and the **intrinsic** i. e., more or less hereditary factors as causative agents in malignant tumor growth.

The Author

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The matter is certainly not so simple as this. Neither has the discovery of several **unspecific** agents solved the problem nor would the discovery of a **prime** causative agent like a bacillus or virus make everything clear. It leaves unexplained and would leave unexplained the striking individual differences in susceptibility and immunity to malignant tumor growth and the connection between these and variety or type of constitution.

On the other hand, it is no easy matter to answer the apparently so simple question: "Is hereditary transmission involved as a major cause in a case occurring in a so-called cancer family?" for the following reasons.

First of all, we have to realize the fact that the increase of cancer incidence in such a family or even in a certain number of such families must not necessarily be a statistically true proof for the inheritance of cancer. Cancer with its high incidence and with approximately one-tenth of the population dying of it, is bound to occur in excess in some families according to the operation of the laws of probability.

Thus single family histories do not mean anything if not proved and checked by careful statistical examinations.

But here we encounter difficulties greater than those we usually have to face when we examine hereditary traits in man. The family histories of large groups are not reliable as regard to cancer. Lack of accurate knowledge of cancer cases in ancestors, mistakes in diagnosis not proved by postmortems, reluctance to admit deaths from cancer, the impossibility of surveying several generations due to the incidence of cancer mostly in advanced age only and many

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Submitted May 16, 1941.

persons dying before reaching this age, will give some valid explanation for the handicap which research has to overcome in this field.

Skillfully devised methods of statistical investigations had to be developed and an example may show the formidable nature of such work as it is found in a paper of Waaler,[1] a Norwegian, outstanding for the quantity and quality of the statistical material used. Waaler took as the foundation material the register of the Norwegian Cancer Committee collected over 21 years and consisting of 6000 cases. Cancer cases in the families (three generations) and especially those in brothers and sisters of these patients scattered over the whole country had to be ascertained. He took as control material all the facts relating to the spouses. These data of course, have an important bearing also on such questions as the influence of purely external environmental conditions (amongst which the possibility of infection is reckoned) for persons living under the same roof.

Questionnaire method proved—and that is important for this kind of research—wholely inadequate for precise information. A corps of 115 helpers medically trained, most of them medical students, was distributed over the whole country and the work of individual inquiry went on for many months. Thus the mass of data required for this complicated statistical analysis was brought together.

For a proper study this paper with its enormous mass of data has to be looked up, but in order to give briefly some results of this excellent piece of statistical work, the following quotation of Weller[2] may be permitted: "As to spouses, Waaler found that no excess cancer mortality over the general population existed. The incidence of cancer was significantly greater among the sisters of cancer patients than among the wives or in the general population. Among males, the difference was considered inconclusive. Waaler's figures show that the proportional cancer mortality in the siblings varies with cancer incidence in the parental generation. When one or the other parent had cancer the proportions for male and female siblings were 40.7 and 53.8 per cent. When both parents died at ages over 60 years, of disease other than cancer, the corresponding figures were 21.7 and 23.1 per cent.

The female siblings of patients with cancer of the breast, uterus, or ovaries showed a larger proportion of cancer than the male siblings, and the type of tumor from which the patient suffered, was largely represented in her female siblings.

For instance, cancer of the breast appeared in 44.7 per cent of the cancerous siblings of females with cancer of the breast, and in but 16.5 per cent of the cancerous siblings of females with cancer other than that of the breast. However, no such relationship was found to exist when the siblings of males with cancer of the lip were considered. Cancer of the lip appeared to be distributed quite independently of inheritable anlagen."

From this quotation of Waaler's work one can easily understand the enormous complexity of the problem, but one can also draw one of the most important conclusions emerging from these elaborate investigations, namely, that cancer is not a unit disease, at least not as far as its genetical behavior is concerned; but that different types and sites of tumor growth behave genetically different. That is a fact which clearly emphasizes the necessity of recording and investigating the data for the incidence of cancer in man separately for each tissue and organ.

To this conclusion we also come from another approach to the problem by a method, now already classic in human genetics: studies and observations in twins. It would take too long to try and describe all the lines of approach which must be traveled to get to the core of the problem from this angle. In a recent publication, O. v. Verschuer and E. Kober[3] surveying the material dealing with the incidence of cancer in twins give the data of 48 pairs of identical and 61 pairs of fraternal twins, published in the literature so far, in regard to cancer occurring in one or both partners and in regard to the localization of the tumors. To this material which v. Verschuer and Kober do not think to be quite conclusive because of the methods in which it was brought together (selected cases and series of cases which were only relatively free from selection) these investigators add now a preliminary report on their own, unselected series of 23 pairs of identical and 56 pairs of fraternal twins. From an analysis of this material v. Verschuer and Kober, however, come to similar conclusions as Kranz who already in 1932 from his material of 22 twin cases could demonstrate the fact that there is a definite hereditary localization factor; for when both identical twins have tumors these are of the same type and involve the same or an homologous organ. That is not the case in fraternal twins. Such an hereditarily determined localization factor is very marked as v. Verschuer and Kober point out, in the cases of cancer of the stomach in identical twins.

On the other hand, we have no evidence from the study of twin material investigated so far to conclude that there is a general hereditary predisposition to tumor growth in man, since the differences in the incidence of tumors in identical and fraternal twins are not significant in this regard. However, the figures investigated are still too small. Thus, it is hardly necessary to say that we are here only in the beginning and that further material and data have to be amassed and investigated to get statistically valid results in this important and promising field of research.

The carefully devised methods used in human genetics as statistics, studies of family histories and observations on twins can, as we have seen, partly serve also in the cancer problem to come to some conclusions, but, according to the specific inherent difficulties, they certainly cannot solve it.

Here the experiment has to come into the question. Observations on animals have been found indispensable in getting better clarification of the fundamental facts which must be tested on material in which it is possible to survey rapidly a number of generations, watched under the conditions of experiment and bred appropriately.

Early work in this field is closely connected with the names of Tyzzer, Bashford, Murray, Leo Loeb and Lathrop, Maude Slye, Strong, Little, Bittner, Lynch, etc., to mention only a few names in this field of research dealing with observations of spontaneous and transplantable tumors in animals, mostly rodents and especially in mice. Different workers have developed different methods which from their viewpoint they think best to come to certain conclusions. The work done in this field is enormous, defying a short survey. But it may be interesting to hear something about the laborious work and the conditions in which Maude Slye keeps her animals. She says in one of her more recent papers:

> "Since the beginning of this work in 1906, every animal has been kept in hygienic conditions under controlled diet and temperature. Every mouse has been permitted to live out its natural life span. None has ever been killed. Every mouse is autopsied as soon as possible after death, and every suspicious tissue is examined histologically for malignancy. The autopsies now number over 140,000 and the individual malignancies somewhere around 100,000."

One does not need to explain this prodigious output of work which has led her to some very clear-cut results about the genetical behavior of breast cancer in mice. But one has to mention the fact that other investigators have with good reasons contradicted some of her conclusions e. g., as to the Mendelian implications of her findings, and that they disagree with her about the mode of transmission. But even taking in account that no agreement has been reached in this question up till now, we have to acknowledge the many important findings now finally established by her and so many other investigators' tireless work. All of them agree (1) that there is an undoubtedly different genetical behavior in the incidence of breast cancer in mice of different strains. Breast cancer has been found in a very high percentage or can be developed by selective breeding in over 90 per cent of the individuals of certain strains through many generations while in others it hardly occurs nor can it be developed by selective breeding and the figure of breast cancers in these strains remains pratically 0. By appropriate crosses between these high and low cancer strains the percentage of cancer in the progeny can be varied at will. (2) Most of the workers agree that there is an inheritable specifity for tumor type and tumor site.

Whether this genetical behavior follows strictly Mendelian laws has still to be ascertained. It seems advisable to keep back judgment at present, since observations published by members of the the staff of the Jackson Memorial Laboratory in 1933 and independently by Korteweg in Amsterdam who arrived at the same conclusions in 1934, show that the development of breast cancer in mice may depend largely on extrachromosomal factors. They have arrived at this conclusion by means of appropriate reciprocal crosses between mice of high and low cancer incidence. In addition, it has been shown that influences of nursing[4] may be operating so that mice nursed by high cancer incidence mothers show a significantly higher incidence of breast cancer compared with the litters nursed by low-cancer incidence mothers and vice versa. These problems are yet under investigation and nobody can say what the final outcome will be. However, one has to stress the point that these results of Little, Bittner and Korteweg only relate to breast cancer in mice and that they do not relate to cancer of the lungs in mice, as Dobrovolskaja-Zavadskaja has demonstrated, or as to skin cancer which follows quite different rules.

But what practical value results from such genetical work in animals? Can it show anything tangible bringing us further forward in questions of human cancer?

The genetical work done in animals has confirmed many findings in man and has at least shown this with some approximation to certainty that heredity plays a part in certain forms of the disease, but that the disease cannot be regarded as an unity according to the genetical behavior. We also know from these investigations that the hereditary factor must not be overweighted or indeed regarded as the sole cause in cancer growth, and that other influences must play a role besides heredity.

It was a lucky coincidence that nearly at the same time as these findings have widened our knowledge in the genetical field so enormously important developments in an apparently unrelated field of cancer research set in and made it possible to study these additional influences with greater and greater success.

About 25-30 years ago several research workers first succeeded in inducing cancer in animals by different means. Fibiger in 1913 e. g. could show that cancer in the forestomach of the rat may be produced by infection with a parasite, **Gonglyonema neoplasticum.** Peyton Rous in 1911 first described a transplantable chicken sarcoma produced by injection of a cell-free extract in normal fowl (a virus) and much interesting work in the virus field has been accomplished since then. It is out of the question that the many possibilities arising from these and similar observations may become highly important for our knowledge of the prime causative agent of cancer. But up till now it could not be demonstrated convincingly that such a parasite infection or a virus is the prime causative agent in cancer formation in man or even in rodents* in both of which cancer can be more easily produced by quite different means, namely, by purely chemical compounds.

Actually, it has been known from observations on so-called occupational cancers that some substances in soot and tar must have cancerogenic properties. The chimney sweep cancer and the cancer of the skin of workers who came in contact with tar especially when originating from gasworks were well known and often described in medical literature. It was Yamagiwa who but in 1913 first could demonstrate a cancerogenic effect in animals by continuously painting the skin with tar. Bloch and Dreyfuss in Switzerland soon could show that this cancerogenic activity was due to neutral nitrogen-free substances with a high boiling point. In the period following these findings the most outstanding event was undoubtedly that Kennaway, Cook and their collaborators succeeded in synthesizing a series of pure hydrocarbons with strong cancerogenic properties. They found, in addition, a striking fact, namely, that all these chemical compounds belong to a certain chemical group containing the tricyclic phenanthrene condensed ring system, similar to the long known animal and plant sterols.

And a second striking observation was made when largely through the work of Doisy and Butenandt the chemical constitution of the ovarian hormones was cleared up and it could be shown that they belong to the same chemical group as well.

The importance of these discoveries following each other quickly can hardly be overstressed. For it now has become possible to induce tumors in animals by means of chemical agents, the structure of which we know exactly and the cancerogenic property of which we can control. These substances lead us to understand how cancer growth may develop locally e. g. in the skin when brought in close contact with such substances for a time long enough. Moreover, the close chemical relationship of some substances physiologically produced in the body gives us a clue to understand how, under certain abnormal conditions, a deranged metabolism or the endocrine system may play an important role in the development of cancer in certain organs remote from any external irritation.

The fact that the endocrine system may be effective in such a way in some forms of tumor growth has already been known since the classic biological observations of Leo Loeb and Lathrop on influences of ovariectomy on the incidence and age of onset of mammary carcinoma in mice (1916) thus preceding the knowledge gained by the work in the field of chemistry by many years. But our knowledge in this field has been mightily enlarged since then in consequence of the discoveries just mentioned. Excellent investigations by Loeb himself and his collaborators, by W. Cramer, Andervont, Lacassagne and so many other workers in this field have brought about a mass of facts definitely showing the importance of the endocrine system and especially of estrogenic hormones in the development of mammary cancer in mice. Thus a few years ago Lacassagne in Paris in his experiments has been able to increase the incidence of cancer of the breast not only in female mice by means of long continued estrin injections, but he also could demonstrate that cancer of the breast can be made to develop, under the conditions of his experiments, in 100 per cent of male mice in strains in which mammary cancer normally does not appear spontaneously.

But here again we find most striking differences which could not have been explained without the knowledge gained in the genetical field. Lacassagne working with different imbred strains of mice of genetically known susceptibility or refractoriness to breast cancer came to the following results (cited after W. Cramer[5])

OCCURRENCE OF MAMMARY CANCER FOLLOWING ESTRIN ADMINISTRATION IN MICE OF THREE STRAINS (LACASSAGNE)

	Strain A	Strain B	Strain C
Spontaneous incidence of Mammary cancer in females	72%	2%	Nil
Mammary cancer after oestrin	100% in males 100% in females	100% in males 100% in females	All animals dead after 15 months without mammary cancer
Time of appearance in months	4-10	9-18	

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*Quite recently some competent investigators repeating the original experiments of Fibiger have doubted very much that the parasite G. n. or at least the parasite alone is the cause for the development of tumor growth in the forestomach of rats. They rather suggest that the vitamin deficiency in the diet as given by Fibiger played an important role in the development of these tumors.

From these results the following facts emerge very clearly, (1) that cancer of the breast in imbred strains of mice with a high spontaneous incidence of mammary cancer could be developed in all male and female mice by estrin treatment, the tumors appearing at an early time of the lifespan (4-10 months). (2) In a strain with a very low percentage (2 per cent) of spontaneous mammary cancer in female mice breast cancer appeared after estrin treatment in both male and female animals as well, but at a late period of the life only (9-18 months). (3) In a strain in which cancer of the breast did not appear spontaneously in many generations, mammary cancer could not be developed either in females or in males even if the mice were continuously injected from birth to maturity with large quantities of estrin.

The bearing which genetically determined factors have on the development and the age of onset of breast cancer can hardly be demonstrated more convincingly. But to avoid misunderstandings the point may be stressed again that the above mentioned findings relate to mammary cancer only and that cancer of other types or sites behave quite differently.

A most complicated interplay of external and internal factors has to be disentangled in careful investigations for different types and sites of tumors, and an enormous amount of work has still to be done. But there seems to be every reason to believe that the period past since the rediscovery of Mendel's law in 1900 has brought us further, step by step, to the solution of our problem.

But far beyond these intriguing researches into causation of cancer stretches the field of **prophylaxis** and it is here that the hereditary aspect may attain predominating importance.

Problems at issue in this field are such as these: Is it possible to recognize by genetical make-up and/or by constitution the person inheriting proneness to tumor formation and is it thus possible to bring in the individual who is especially in danger of the disease, for early examination and observation? Can we thus achieve the requirements of cancer therapists who demand cases in the very early stages for treatment, which already means in so many cases cure?

Further, will it be possible by recognizing the individual with hereditary susceptibility to a certain form of tumor to safeguard him from attack altogether by knowing what external factors must be avoided? This goal seems not too remote any longer since the methods of linkage studies in man, for which the first was presented by Laurence H. Snyder as early as in 1926,[6] have been developed and improved since then by the work of Bernstein, Wiener, and others. They may together with other methods show a possible way to answer these questions in the future.

In addition to numerous other possibilities, such an outlook might well reduce the incidence of occupational cancer, by warning the hereditarily potential sufferer from the dangerous course.

This is the type of problem with which geneticists now are concerned. It is one of the most pressing of medical problems: for this widespread malady takes an annual toll of hundreds of thousands of lives, quite apart from the particular dread which it causes to man: painful, still mysterious, well-named **malign.**

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Riboflavin Therapy in Nonvascular Keratitis

Our material consisted of 12 ambulatory patients presenting themselves at the Clinic of the Episcopal Eye, Ear and Throat Hospital. In this series there were four cases of phlycentular keratoconjunctivitis.

It is our opinion that these 12 cases were definitely benefited by the oral use of riboflavin in conjunction with occlusion of the affected eyes. In none of these cases did we believe that there was a general ariboflavinosis, as manifested by the characteristic lesions of the mucocutaneous junctions and the seborrheic dematitis of the face. However, it must be borne in mind that Sydenstricker and his co-workers were of the opinion that ariboflavinosis was probably the most prevalent avitaminosis, and that many diverse ocular symptoms were due to this lack. Sydenstricker has also observed five cases of syphilitic keratitis in which treatment with riboflavin was accompanied by rapid improvement during periods when antisyphilitic drugs were withheld. He expressed the possibility that syphilis produced keratitis only when the oxygen supply of the cornea was impaired by riboflavin deficiency, which was probably caused by the treponema. We feel that any disease in the cornea may cause such a deficiency in the exposed avascular tissue.—Benjamin Rones, M.D. and Edward McKay, M.D., Washington; Med. Annals, of the Dist. of Columbia, Vol. X, No. 8, August, 1941.

Trichinosis Treated With Sulfapyridine

FRANK M. WISELEY, M.D. and I. E. TREECE, M.D.

MRS. M. W., age 29, seen by one of us (I. E. T.) on December 22, 1940. Chief complaint was sweling of face and eyelids; diarrhea, and abdominal cramps. Present illness started December 20, 1940, with diarrhea and cramps. The cramps were widespread throughout the abdomen. There also was slight swelling of the face.

Past History—In 1934 had a hysterectomy. Migraine headaches have occurred throughout her entire life. Past three weeks has been eating sausage which was cooked rare done, which was prepared in this manner to aid her husband in eating it, due to recent extraction of his teeth. **Habits**—Glove factory worker. History is otherwise negative.

Examination—When seen on December 22, 1940 (by I. E. T.) patient had no fever, muscle tenderness or soreness. There was simply a swelling of the face and eyelids, and a mild diarrhea. Urine was negative on that and the following day. She was given Bismuth for the diarrhea. It was at that time thought to be allergy. As the condition persisted and the urine was negative on December 23, 1940, she was referred (to F. M. W.) for examination.

Examination, December 24, 1940: **General**—Young white obese female who walks into office showing swollen face and eyelids. **Eyes** react to light and aicommodation. Upper and lower lids both swollen, extending into both cheeks. **Abdomen**—Diffuse abdominal pain, no evidence of any localization. **Muscular System**—No evidence of any muscle soreness. The remainder of the physical examination was essentially negative.

The initial blood examination made December 24, 1940, showed HGB 80 per cent; WBC 5900; Stab. 11 per cent; Lymph. 13 per cent; L. Mono. 1 per cent; R.B.C. 5,140,000; Sediment 18 mm.; Segment 44 per cent; Eosin 31 per cent.

The antigen material furnished by Dr. A. A. Hall, of Columbus, Ohio, in dilution 1:1000—1:10,000 was positive. A diagnosis of Trichiniasis was based on: (1) History of exposure to uncooked pork; (2) high Eosinophilia; (3) swelling of the face and eyelids; (4) positive antigen reaction.

It will be noted here that in this case there were no muscle sections taken because there were no signs of symptoms referable to any muscle or groups of muscles. It was decided to try the use of sulfapyridine in this case—grains 16.4 were given after meals and at bedtime.

December 25, 1940—Temperature 102; muscle pains and soreness pronounced, face swollen. Therapy started. December 26—Temperature 101.6. No change; no appetite, slight nausea and headache. December 27—Temperature 102. Condition the same. December 28—Temperature 100.8. Condition the same. December 30—Temperature 101. Blood examination was made—Hgb. 84 per cent; WBC 12,600; Stab. 10 per cent; Lymph. 20 per cent; Baso. 1 per cent; RBC 5,170,000. Segment 25 per cent; Eosin. 43 per cent; L. Mono. 1 per cent. December 31—Temperature 100.2; sulfapyridine level—2 mgm.

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January 2, 1941—Temperature 100.6; January 3—Temperature 101. Decrease in facial swelling. January 4—Temperature 100. As long as she was quiet there was no muscle pain. Discontinued sulfapyridine because of drop in Hgb. Ferrous sulfate grain 5 t.i.d. was given. Blood examination: Hgb. 76 per cent; WBC 11,500; Segment 29 per cent; Eosin. 47 per cent; RBC 4,440,000; Stab. 3 per cent; Lymph. 21 per cent. January 5—Temperature 100.2. Condition the same. January 6—Sulfapyridine level 6 mgm. January 7—Temperature 99.6.

January 8—Blood examination, Hgb. 84 per cent; WBC 13,700; Segment 19 per cent; Eosin. 50 per cent; RBC 4,190,000; Stab. 4 per cent; Lymph. 25 per cent; L. Mono. 2 per cent. January 10—Temperature 99.8, Sulfapyridine started again. January 13—Temperature 99. No appetite, nauseated.

January 15—Blood examination. Hgb. 86 per cent; WBC 7,700; Segment, 38 per cent; Eosin. 37 per cent; RBC 4,730,000; Stab. 2 per cent; Lymph. 20 per cent; L. Mono. 3 per cent.

January 16—Temperature 99.8. Only slight facial swelling. Because of extreme nausea and headache, sulfapyridine was discontinued for two days. January 18—Temperature 99. Temperature continued low grade, sulfapyridine started. January 27—Temperature continued normal; there was no swelling and no muscle pains. Appetite was good.

March 15—Blood examination. Hgb. 80 per cent; WBC 5,800; Jugen. 2 per cent; Segment 39 per cent; Eosin. 12 per cent; L. Mono. 1 per cent; RBC 4,880,000. Sediment, 22mm.; Stab. 5 per cent; Lymph. 39 per cent; Baso. 2 per cent. The Eosin. has dropped to 12 per cent and the patient is clinically quite well.

Submitted May 19, 1941.

The Private Physician in the Campaign Against Diphtheria

ABRAHAM GELPERIN, M.D., AND CARL A. WILZBACH, M.D.

ADEQUATE diphtheria prophylaxis in any community is dependent upon two factors: (1) creation of a demand by parents for the preventive medical procedure; and (2) fulfillment of this demand by cooperation between health department and the private practitioner.[1]

The former is accomplished by vigorous public health education. In attacking the latter, health departments have evolved two basic approaches. Some communities have enlisted the aid of the private physician by paying him a small fee to give the inoculations, either in his office or in a designated health center.[1,2] Others, including Cincinnati, offered free prophylactic inoculations through health department facilities to all who would avail themselves of the service. This latter approach would seem to ignore the private practitioner. However, an evaluation of our results in Cincinnati prove that this assumption is incorrect.

The method utilizing fees has proved effective.[1] Nevertheless, we believe it is fundamental to make diphtheria prophylaxis as accepted a part of infant care as is the physical examination itself. When this is accomplished, parents expect to pay for the inoculations rather than accept them as a free service.

CAMPAIGN TO CONTROL DIPHTHERIA

The campaign to control diphtheria in Cincinnati was instituted in the autumn of 1928. An intense program of public health education was initiated and the health department offered free prophylaxis to all. Posters, radio, newspaper articles, talks to lay groups and home visits were utilized. The last-mentioned technic was and remains especially effective. Health department nurses deliver all birth certificates and re-visit each family eight to nine months later, and again when a child reaches two years of age. At each visit, diphtheria prevention is discussed and appropriate literature left with parents.

The annual report of public and parochial school medical services for September, 1930, through June, 1931, reveals that 95 per cent of prophylactic inoculations were given by public health agencies.* Approximately 35 per cent of all matriculating children had received injections.

The Health Department Annual Report for 1935 shows that 75 per cent of all prophylactic inoculations given during that year had been administered by Health Department physicians and free clinics. A W.P.A. survey made during the summer, showed that approximately 55 per cent of all children between the ages of nine months and five years had had inoculations. In the 1935 pre-school examinations, 45 per cent of all matriculating children were examined—57.3 per cent had had prophylaxis. This figure is comparable with that of the W.P.A. survey.

It is the policy of the Cincinnati Health Department to urge all non-indigent families to visit their family physician for prophylactic inoculation. For those families unable to pay his usual fee, free toxoid is supplied if the doctor will charge but $1.00 for each injection. It is interesting to note that in 1935 our nurses tabulated 26 physicians who would not give diphtheria prophylaxis to infants and children sent to their offices. Nine physicians told parents to wait until the infant was older, this usually meant to wait another year or longer; ten physicians absolutely refused to give the injections and seven would not inoculate a child over 10 years of age.

In the 1940 pre-school examinations, 55 per cent of all matriculating children were examined. Sixty-three point four per cent had had prophylactic inoculations and 52 per cent of this group received their injections from the family physician or pediatrician. As a result of prophylactic inoculation during the interim, the autumn re-examination of this group revealed that the per cent of inoculated children had risen to 72 per cent. A survey of all matriculating children was made during December of 1940—78 per cent

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Submitted May 22, 1941.

From the Cincinnati Health Department, Cincinnati, Ohio.

*The Academy of Medicine, as well as the Public Health Federation and the Babies Milk Fund have been actively cooperative in the diphtheria prevention program.

had had inoculations prior to their entrance into school. This figure is comparable to the percentage obtained at the autumn re-examination mentioned above, for all children who did not come to the pre-school examinations were contacted during the summer months.

During 1940 no physician refused to give prophylactic inoculations to any infant or child sent to his office by a Health Department nurse or physician. Occasionally a child was referred back to the Department for inoculation. The percent of children receiving diphtheria prophylaxis from private practitioners has risen from 5 per cent in 1930-31 to 25 per cent in 1935 and 52 per cent in 1937-40.

TABLE I

Administration of Diphtheria Prophylaxis by Private Physicians and Public Health Agencies in Four Economic Groups

By Census tracts Economic groups	Approx. per cent of total population	1940—Preschool children examined in Summer roundup		
		Had prophylactic inoculations %	Inoculated by family doctor %	Inoculated by public agency %
I (lowest incomes)	23	60	9	91
II	26	55	40	60
III	26	60	65	35
IV (highest incomes)	25	80	89	11

A study was made to determine the distribution of this 52 per cent according to economic status. Forty schools were arbitrarily divided into four economic categories[3] and their pre-school examination reports studied (Table I).

In the lowest group, only 9 per cent went to a private physician. This figure rose to 40 per cent, 65 per cent and 89 per cent in the progressively higher economic groups. It may be seen (Table I, column 3) that there is no marked variation in the percent of inoculated pre-school children in the four economic groups. It was estimated that 20 per cent of parents of children who had not had prophylaxis flatly refused to allow the procedure. The remainder of our "failures" were attributed to the inertia and ineptitude of parents and to the fact that we have a considerable floating population which is difficult to contact.

The protection of the city's child population against communicable disease, for example diphtheria, is the responsibility of the Health Department. Nevertheless, the private physician has assumed to a major extent the personal responsibility for a preventive medical practice which had previously been administered almost entirely by the Department of Health. At the present time, Health Department physicians and free clinics, on the whole, inoculate only those children in the lower economic levels.

The marked drop in diphtheria morbidity that occurred in Cincinnati during 1930 and was maintained to 1934[4] was assumed to be material evidence of the effectiveness of mass diphtheria prophylaxis. This was strongly emphasized to the public. In spite of a rise in diphtheria morbidity from 1934 through 1939, parents continued to accept diphtheria prophylaxis as a necessary part of the routine medical care of their children. There were three factors responsible for this continued acceptance. First, parents are being made more and more conscious of the value of prevention in its broadest aspects.[5,6] Second, a precipitous decline in case fatality rate was observed during the period of rising morbidity.[4] It was also noted that the great majority of mild cases of diphtheria occurred in children who had had inoculations. Of paramount importance is the rapport that has been created between Health Department and private physician. This has been assisted by the following:

1. Since the Health Department is the official health agency responsible for the control of communicable diseases, the utilization of a prophylactic procedure for the prevention of a formerly unpreventable disease was considered to lie within its domain.
2. Free prophylactic inoculations were offered to all, and it was hoped that public health education, by both the Health Department and the private physician, would create an acceptance of diphtheria prophylaxis as a necessary part of infant care.
3. During the first years of the campaign, parents were urged to go to their own doctor for the inoculations, but the issue was not pressed. The objective during the first few years was to see to it that as many children as possible received prophylactic inoculations. As diphtheria prophylaxis became more and more an accepted procedure, the department began to emphasize the necessity of parents going to their family doctor. We still continue to inoculate all who insist upon it, but it has been noted with satisfaction that parents, on the whole, are beginning to expect to pay for diphtheria prophylaxis.
4. Some physicians did not believe in diphtheria prophylaxis. Nevertheless, their attitude has been observed to change because it became difficult not only to refuse to give prophylactic inoculations to the children of patients who came to their offices and requested the procedure, but also to ignore the fact that diphtheria prophylaxis had become an established part of the medical practice of a great majority of physicians.
5. The private physician was made an integral part of the diphtheria control program. The official attitude of the Academy of Medicine was publicized and physicians were personally contacted by Health Department nurses. They were consulted when problems pertaining to patients were encountered.

The campaign against diphtheria illustrates the desired trend of events. The public is educated to the value of a preventive medical procedure by the responsible health agency in cooperation with other agencies and the private practitioners. Within a relatively short period of years, the program of public health education as well as the observed results of the campaign have enabled the private physician to incorporate diphtheria prophylaxis into his infant care routine.

SUMMARY

1. The diphtheria control campaign was initiated in Cincinnati in the autumn of 1928 with an intense program of public health education and the offer of free prophylactic inoculations.

2. The percent of inoculations given by private physicians has risen from 5 per cent in 1930-31 to 25 per cent in 1935 and 52 per cent in 1937-40.

3. The Health Department physicians and free clinics now inoculate, on the whole, only those children in the lower economic strata.

4. The factors that assisted in producing the acceptance of diphtheria prophylaxis as a necessary part of preventive medical practice are discussed.

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Thiamin Chloride in Herpes Zoster

The literature is replete with the benefits of thiamin chloride in many diseases of the nervous system. It may be, as Wechsler says, that avitaminosis is an important factor in these cases. In respect to herpes zoster, however, a different mechanism probably exists. Steinberg, for example, noted three cases of herpes zoster occurring in the course of treatment of 390 cases of chronic arthritis with vitamin B_1. He attributed this complication to massive overdosage with thiamin chloride. This has not been confirmed by others. Vorhaus used thiamin chloride successfully in peripheral neuritis of unspecified type. Stevenson used it intra-muscularly in sciatica and in general nerve pain and reported success in 63 per cent of cases. Rattner and Roll used thiamin chloride subcutaneously in doses of 2000 units every two or three days in herpes zoster. Indifferent results were obtained, but this was attributed to the advanced age of the patients and the tardiness of treatment. Nitzulescu and Triandaf used thiamin chloride with excellent results in herpes of the cornea.—Sydney F. Smith, M.D., Highland Park, N. J.; Jour. Med. Soc. of N. J., Vol. XXXVIII, No. 8, August, 1941.

Allergic Diseases That May Cause Abdominal Symptoms

The importance of allergy in diagnosis of abdominal conditions has become increasingly apparent in recent years as gastrointestinal and genitourinary syndromes of allergic origin have slowly assumed clinical form and definition. The allergens responsible for abdominal manifestations are largely of the ingestant type and, in ordinary experience, principally foods. Gastrointestinal allergic reactions are of two general types, which have been designated etiologically as "minor" and "major" and clinically as "acute" and "chronic."*

The "acute" type of reactions occurs as a rule in a person who has a few food sensitivities which are easily recognized and probably well known to him.

The "chronic," or "major," allergic reaction presents much more difficulty from the diagnosis standpoint. The symptoms are varied and indefinite and of long duration. "Bad breath," "bad taste in the mouth," "sour stomach," "gas," vague abdominal discomfort after eating, periods of spastic constipation and diarrhea perhaps with mucus in the stool are among the more common manifestations. There is often a history of associated allergic responses such as urticaria, migraine or vasomotor rhinitis either in the patient himself or in some member of his family. Physical examination usually gives negative results except occasionally to reveal tenderness over the descending colon or distention of the cecum. Laboratory examinations reveal little except occasionally eosinophilia. Roentgen examination is apt to be of negative value, though exceptionally one finds unexplained pylorospasm, increased gastric or intestinal activity or spasm of the lower bowel. Differentiation from gastric or duodenal ulcer, disease of the gallbladder, renal disease, appendiceal disease or intermittent obstruction of the bowel is at times extremely difficult and can be made only after exhaustive study and perhaps a trial period of allergic control. Whether gastrointestinal allergic reactions may be a pathogenic factor in some instances of chronic ulcerative colitis and of regional ileitis is a problem which has not been solved but which deserves serious consideration.—Frederick W. Madison, M.D., Milwaukee; Wisc. Med. Jour., Vol. 40, No. 8, August, 1941.

Workers caring for patients with tuberculosis can only be shielded from exposure to infection by conscious and conscientious precautions.—Emil Bogen, M.D., and Wm. Dunn, M.D., Amer. Rev. of Tuber., March, 1941.

The Topical Use of Sulfathiazole in Decubitus Ulcers

Preliminary Report

JOSEPH I. GOODMAN, M.D. and JOSEPH F. CORSARO, M.D.

AMONG the important complications which occur in persons afflicted with chronic disease is the frequency of decubitus ulcers, more commonly known as "bed sores". Every physician who has managed patients confined to bed for some length of time in chronic hospitals, nursing or convalescent homes and private dwellings, has been confronted on many occasions by the seemingly inevitable appearance of these "bed sores". They occur perhaps with greatest regularity among those afflicted with neurological diseases such as cerebro-vascular accidents, spinal cord damage and multiple sclerosis.

It is not the purpose of this discussion to probe into the etiology of decubitus ulcers. Suffice it to say in a word that the ischemia which results from pressure over bony parts effects necrosis at that site. The ensuing problems concerned in promoting the healing of such lesions have often become the bane of the existence of physicians, nurses, and attendants.

Any attempt to delineate the variety of treatments and the innumerable methods which have been suggested to clear up "bed sores" would serve no purpose here. As in most medical conditions for which a large number of procedures have been advocated, this serves as a testimonial to their failure. Perhaps the prime significance of this problem lies in the conclusion that prophylactic measures when applied properly from the onset supersede in effectiveness any of the therapeutic endeavors which can be applied subsequent to the occurrence of the decubitus ulcer. In spite of careful surveillance and watchfulness these lesions are prone to confront us.

Within the past two years, in a county nursing home for the care of chronically ill patients, we have treated over 400 individuals. In the presence of a high standard of nursing care which has been especially directed toward the prevention of decubiti we have encountered in many instances the development of such lesions.

It has been our experience that attempts to promote healing in "bed sores" by utilizing several of the accepted methods of treatment have been almost universally unsuccessful. Many of these patients died of intercurrent infection and we believe that the death of others may have been hastened by the presence of these decubitus ulcers.

Our cognizance of the recent development of the local use of sulfonamide therapy in a variety of conditions led us to readily accept the suggestion of our supervisor of nurses that we treat this group of indolent ulcers in a similar manner. A review of recent literature points to the almost exclusive choice of sulfanilamide when local therapy to wounds was considered. Because of the proved value of sulfathiazole in the treatment of staphylococcus infections it seemed logical to employ this drug in preference to sulfanilamide.

The Authors

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- Dr. Corsaro, Cleveland, Ohio, is a graduate of Western Reserve University, 1938; member of Sigma Xi.

In our early treatment we utilized a pulverized preparation of the commercially available sulfathiazole tablet (0.5 Gm, 7.7 gr.) which was applied locally to the ulcer. In the later stages of the work a powdered preparation of sulfathiazole was made available to us through the courtesy of one of the pharmaceutical houses,* but proved to be less efficacious.

The finely divided sulfathiazole was applied to the base of the lesion daily by means of a salt shaker (a powder blower is recommended) and the quantity varied in proportion to the size of the lesion. In general sufficient powder to form a complete coating was utilized. The actual amount varied from one gram in the case of the smaller ulcers up to three grams which was necessary in the largest of our series. During the treatment with sulfathiazole all other modes of therapy were eliminated except the use of a light cradle or an infra red lamp.

The following is a brief summary to demonstrate the type of case to which this suggested treatment has been applicable.

REPORT OF CASES

Case 1. A 24-year-old white male had a laminectomy performed in March, 1939, for an hemangioma involving the cauda equina. The chief disability consisted of paresis and atrophy

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Submitted June 6. 1941.

From the Cuyahoga County Nursing Home, 2905 Franklin Ave., Cleveland, Ohio.

*Courtesy of Research Department—Winthrop Chemical Co.

of those muscles in both lower extremities which are innervated from the second and third lumbar segments of the cord. In addition there was partial sphincteric incontinence. On March 6, 1940 (one year later), a decubitus ulcer appeared over the left buttock at a site whereon an area of complete anesthesia had been discovered. This lesion had been treated with potassium permanganate soaks and the application of infra red rays. Subsequently cod liver oil ointment dressings and merthiolate applications were utilized. On January 11, 1941, after ten months of unsuccessful treatment with these methods, sulfathiazole powder was applied topically. At this time the lesion measured 5.0 cm. by 3.7 cm. (See Figure 1-a). On January 24, 1941, the lesion had partially healed. By February 6, 1941, the ulcer had completely healed (See Figure 1-b).

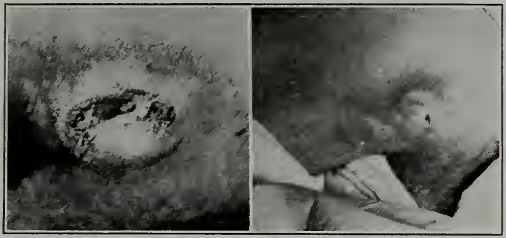
Fig. 1-A Fig. 1-B

Case 2. A 64-year-old colored male was admitted on January 9, 1941, from a local hospital wherein he had been confined since October, 1940. Because he had suffered a cerebral hemorrhage of severe degree (this proved by spinal fluid examination) his recovery was necessarily slow and limited. He had developed a "bed sore" over the sacrum for which treatment with a heat lamp and the application of "enzymol" were utilized. At the time of his admission to the nursing home there was a large, deeply undermined, pressure necrosis over the sacrum which measured 8 cm. by 5.5 cm. On January 16, 1941, treatment was begun with the application of sulfathiazole powder locally (See Figure 2-a). On February 6, 1941, the measurements had been reduced to 5.3 cm. by 3.5 cm. (See Figure 2-b).

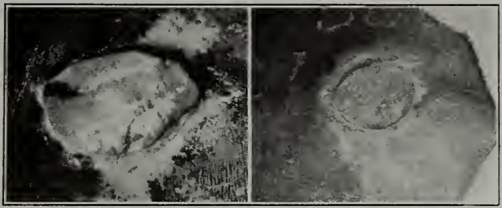
Fig. 2-A Fig. 2-B

Case 3. A 33-year-old white female was admitted to the nursing home on May 26, 1940, with an advanced progressive multiple sclerosis. Later on she was confined to her bed and developed a decubitus ulcer over the left greater trochanter. This enlarged in spite of the use of infra red rays and alternation of Dakin's irrigations, balsam Peru and the application of urea crystals. On January 23, 1941, when sulfathiazole powder was first applied locally the measurements were 4.5 cm. by 4.5 cm. (See Figure 3-a). On February 6, 1941 (two weeks later), the size had diminished to 3.5 cm. by 3.4 cm. (See Figure 3-b).

Case 4. A 36-year-old white female was admitted on February 17, 1939, with a diagnosis of advanced multiple sclerosis. Following an attack of pneumonia in April, 1939, she developed a large, deep, irregular necrosis over the right greater trochanter. This lesion at first was irrigated daily with normal saline solution and the infra red rays were applied. Dakin's irrigations, balsam Peru, Gentian violet and potassium permanganate irrigations were successively tried. On March 29, 1940, the edges were freshened and then united by means of sutures but the resultant union soon broke down again. Cod liver oil ointment was now applied unsuccessfully and was followed by the use of merthiolate applications. After one year and nine months of this sort of treatment the epithelial surfaces had closed in but there remained a deep, infected draining sinus. Beginning on January 23, 1941, powdered sulfathiazole was injected daily into the sinus. The drainage promptly subsided and healing rapidly ensued.

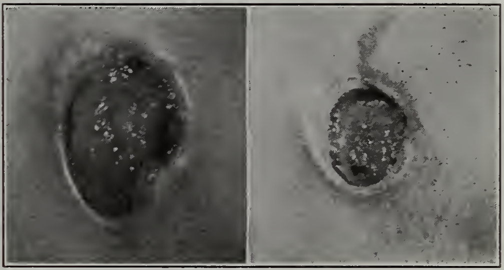
Fig. 3-A Fig. 3-B

Case 5. A 51-year-old white female who had developed a paralysis of both lower extremities in the presence of a tabetic involvement was admitted to the nursing home on December 17, 1940. On January 20, 1941, there was noted on the left heel a pressure necrosis which measured 2 cm. by 2 cm. in diameter and was covered by a dirty slough (See Figure 4-a). On February 14, 1941, sulfathiazole powder was applied locally. On February 27, 1941, there was a marked decrease in diameter and the depth of the ulcer was diminished greatly (See Figure 4-b). At this time the measurements were 1.5 cm. by 1.25 cm. in diameter.

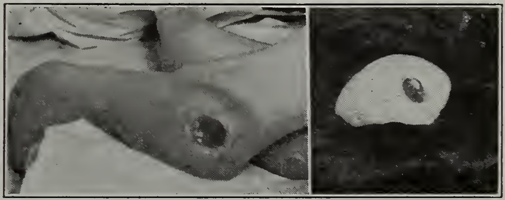
Fig. 4-A Fig. 4-B

RESULTS AND COMMENT

In the first case we were confronted with a lesion which had failed to heal within a period of 10 months. During this time there was daily treatment of some kind with one or more of the generally accepted measures. There was utter failure of response. The application of sulfathiazole powder produced almost magical disappearance of the ulcer with complete healing within 21 days.

The second case represents the large group of sacro-decubitus ulcers which occur so frequently, especially following cerebro-vascular accidents. The appearance was ragged, irregular, dirty and undermined. As the measurements reveal, the rate of healing during the first three weeks exceeded one millimeter per day in the resultant diminution of the diameter of the ulcer. Concomitantly there was a rapid decrease in the depth and the formation of granulation tissue was enhanced.

The third case brings up another sizeable group of "bed sores"; those which occur over the greater trochanter. This patient had an intractable ulcer of seven months' duration which had progressively increased in size despite intensive therapy. In this patient the lesion was contaminated at all times by urinary and fecal excreta. Healing was further complicated in that the processes of repair were mechanically inhibited by movement of the extremities. Despite these impeding factors, the application of sulfathiazole powder was followed almost immediately by the appearance of a clean and healthy granulation tissue. The reduction in size after two weeks of treatment is readily apparent by comparing Figures 3-a and 3-b.

The fourth case represents 21 months of concerted effort during which time nine different accepted methods, including the use of surgical apposition, were employed. Nevertheless there remained a rather deep central sinus tract from which a thin purulent exudate drained. Utilization of sulfathiazole powder in this sinus promoted immediate healing.

The appearance of a deep, necrotic ulcer on the heel of our fifth patient prompted the immediate application of sulfathiazole powder. Here again the rapid formation of granulations demonstrated the efficacy of this method of treatment.

Our success in the application of this mode of therapy to local lesions led us to attempt its utilization in a variety of other conditions. These cases included one patient with chronic osteomyelitis, two cases of traumatic, indolent ulcers of the feet which had failed to heal completely, an instance of draining fistulous tracts in a recently amputated stump and a stubborn case of pilonidal sinus. The rapidity and completeness of healing in each case was tantamount to that which we have come to expect in the cases which we have described more completely above.

The observations during our study of the progress of healing in this group of ulcers has brought out several notable characteristics. The base of the ulcer which, as we all know, is inevitably covered by a necrotic and purulent slough, becomes converted within 24 hours into a clean, healthy-appearing surface. This now provides the foundation upon which is produced abundant granulations. This tissue fills in the undermined edges of the lesion so that the diameter, as well as the depth, is reduced in extent. It is worthy of note that the presence of moisture, which can be considered detrimental to the rapid healing of such an area, is minimal.

In conclusion, our limited experience in this group of patients seems to indicate that the employment of the topical application of sulfathiazole powder, in the manner which we have outlined, may prove to be a progressive step in the treatment of indolent ulcers. In our hands, this method has proved to be the only one from which universal success can be expected in the management of decubitus ulcers. In view of the simplicity of application of this treatment and the beneficial results obtained in a heretofore discouraging condition, we hasten to urge a more widespread trial by other members of the profession.

SUMMARY

1. The difficulties attending the treatment of decubitus ulcers in chronically ill patients is discussed.

2. The use of sulfathiazole powder topically in this group of "bed sores" presented itself as a logical mode of therapy.

3. This local treatment was used exclusively in a series of five decubitus ulcers of long standing.

4. Our observations reveal that almost immediately after the application of sulfathiazole powder there is a clearing up of infection and the appearance of clean, healthy granulation tissue, which is followed by healing of unwonted rapidity.

5. Concomitantly, a series of related lesions were treated in a similar manner with uniform success.

6. These results indicate that the local application of sulfathiazole powder in the manner described may prove to be the solution of the problem in the healing of indolent lesions.

Surgical Treatment of Tuberculosis

The trend toward surgical treatment of tuberculosis is perhaps the most significant and far-reaching change which has come about in the tuberculosis field. This has involved changes in design and equipment of the hospital, in the organization by the staff, in provision for nursing of surgical cases, and development of closer relations with general hospitals. Wherever the tuberculosis hospital is not prepared to meet the demand for better operating rooms, laboratories, and roentgen ray equipment, the facilities of the general hospital must be utilized.—Editorial, Penna. Med. Jour., Mad., 1940.

Torsion of the Omentum With Report of a Case

CARL R. STEINKE, M.D.

TORSION of the omentum is not a common condition and is very seldom if ever diagnosed before operation. In a review of the literature available up to 1939 there were found 124 operated cases, many being associated with inguinal hernia. Of these 81 were males and 43 females.

The preoperative diagnosis was stated in 97 cases as, appendicitis 59, appendiceal abcess 4, gallbladder disease 16, hernia 11, diverticulitis with abscess 2, ovarian tumor 2, salpingitis 2, and tumor 1.

There were no complications mentioned in a report of 106 cases. Two deaths were recorded in this summary, one with pulmonary embolus and one from broncho-pneumonia.

Six had had previous abdominal operations, six were reported as not having been operated before, while no mention was made for 109 cases.

The age was stated in 118 instances with an average of 39 years. The youngest were two of 7 years and one of 9 years, while the oldest were one each of 70 and 80 years.

CASE REPORT

C. C. W., white male, aged 54, admitted to the City Hospital of Akron, June 13, 1934, and discharged June 23, 1934.

He gave the history of having had rheumatic fever at eight years, typhoid fever at 11 years, scarlet fever at 20 years, and erysipelas of the face at 40 years. These left him with nephritis and hypertension, his blood pressure at the time of operation being, systolic 202, and diastolic 96. There had been no previous abdominal operation. He had had attacks which he called indigestion in the form of gas eructation and distress in the abdomen for several years.

His acute condition started the evening of June 11, 1934, with a feeling of discomfort and weight in the epigastrium, and considerable gaseous eructation. He took castor oil the following morning without getting relief. The pain grew more severe and tended to localize to the right of the umbilicus, without radiation. There was no nausea, vomiting, chills or fever. The stools were normal, with three evacuations on June 12, and there was no urinary abnormality aside from some albuminuria at times.

He was seen by Dr. A. H. Franks on June 13, and sent into the hospital with a diagnosis of acute appendicitis. His temperature was 100 degrees Fahrenheit, pulse 90, and the urine negative. The hemoglobin was 95 per cent Tallquist and the white blood count 12,050 with 70 per cent neutrophiles, and 30 per cent large and small lymphocytes. The abdomen was rounded, somewhat distended, but not rigid. There was tenderness to the right of the umbilicus but not much spasm and no rebound tenderness. The right inguinal hernia, which had been present for several years, was not down. The remainder of the physical examination showed nothing abnormal except for moderate obesity. His mother had died of cancer and his sister of diabetes.

Operation was performed on June 13, 1934, under spinal anesthesia of 100 mgm. neocaine injected in the third lumbar interspace, with the preoperative diagnosis of acute appendicitis. A right rectus incision was made. The distal portion of the omentum, about four inches in length and three inches in width, was found twisted on itself two and one-half times, and was becoming gangrenous. The appendix was somewhat sclerosed and was bound down retrocecally. The gallbladder seemed in good condition. The stomach and duodenum appeared negative. A large hernial sac was found going down the right inguinal canal but the patient refused to have it repaired. The appendix was removed with inversion of its stump and the twisted omentum was resected. The wound was closed in layers.

The post-operative course was uneventful and he left the hospital in good condition. Since that time he has enjoyed comparatively good health up to the time of this report.

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The Author

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Submitted May 24, 1941.

Unexplained Fever

One hundred cases of long continued low-grade fevers of unknown origin were studied in the Mayo Clinic for eleven years. Clinical records of these cases were analyzed in regard to age, sex, occupation, fever characteristics, associated symptoms, general appearance, neurotic tendencies, the presence of foci of infection, the course of the disease, and the outcome. Such fever is almost three times as frequent in the female as in the male, and occurs most frequently between the ages of twenty and forty years, at that period of life in which the physical and mental strain is probably greatest. Focal infection was present in 35 per cent in this series, but removal of foci, although often helpful in the individual case, did not increase materially the percentage of recoveries. Neurogenic manifestations were pronounced in at least 25 per cent of this series.—R. E. Mitchell, M.D., Indianapolis; Jour. Ind. S. M.A., Vol. 34, No. 9, September, 1941.

Report of a Case of Transient Pulmonary Edema

(Loeffler's Syndrome)

ARTHUR BAER, M.D.

As transient edema of the lung is uncommon, it appears important to report a patient presenting the phenomenon.

Mrs. M., 30 years old, had been asthmatic ever since her early childhood and was under treatment for it. An X-ray taken as a routine during the course of treatment (Fig. 1) showed practically normal lung structure. At a later time during the course of a general examination a second X-ray picture presented an astounding character (Fig. 2). On that day (Dec. 27) the patient felt perfectly well and was free from fever. Although the X-ray revealed a dense, almost homogeneous, sharply delimited shadow in the upper part of the left lung, blood examination on the same day showed no increased erythrocytes sedimentation rate, no leucocytosis, but an eosinophilia of 25 per cent. A third X-ray taken two days later (Dec. 29) still showed the shadow in the same extension and limitation, but instead of evidencing the former homogeneity, it now appeared spotted and less dense (Fig. 3). Detached from the series, this single picture would undoubtedly have suggested tuberculosis, whereas Fig. 2 would have given suspicion rather of neoplasma. Another X-ray taken a week later (Jan. 6) exhibited but a few remaining spots, while the fifth picture (Jan. 18) indicated a complete return to the normal pulmonary shadow (Fig. 4).

Loeffler in 1932 was the first to publish case histories recording transient lung consolidation. Other clinicians noting this phenomenon, later called "Loeffler Syndrome", concurred in the details as described by him: While the general health is rarely or only very slightly disturbed, and fever is absent or moderate in degree and of short duration, and the respiratory organs generally are free from affections sufficient to cause significant physical findings, the X-ray pictures in sharp contrast exhibit a pulmonary shadow of surprising extent indicating an infiltrate that vanishes within a few weeks without leaving a shadowed trace. A rapid increase of eosinophiles in the blood is usual and this is almost unanimously interpreted as an allergic reaction.

Leitner in his work with victims of pulmonary disorders observed numerous cases of the Loeffler Syndrome and interpreted them as the expression of a hyperergic reaction of the body against tuberculosis. This assumption that an allergy is the cause of the transient lung edema is strongly confirmed by a great number of observations. Engel, e.g., noted an increased occurrence in China during the florescence of the grasses in May and June and describes an allergic Spring edema of the lung. Most of Loeffler's cases also occurred within seasonal limitations. Equally interesting is the experience of Meyer, who reported that many of his patients at his sanatorium reacted to mayflowers by manifesting a lung edema and definite phenomena of hay-fever.

Further enlightening from a pathogenic point of view are Steiger's references to patients who in addition to the pulmonary X-ray findings, suffered from edema of nose, ears, and hands. A divergent opinion is offered by Mueller who considers that larvae of ascarides are the direct cause of the reaction. He states that the larvae, having penetrated through the intestinal wall into the liver, reach the lung after

The Author

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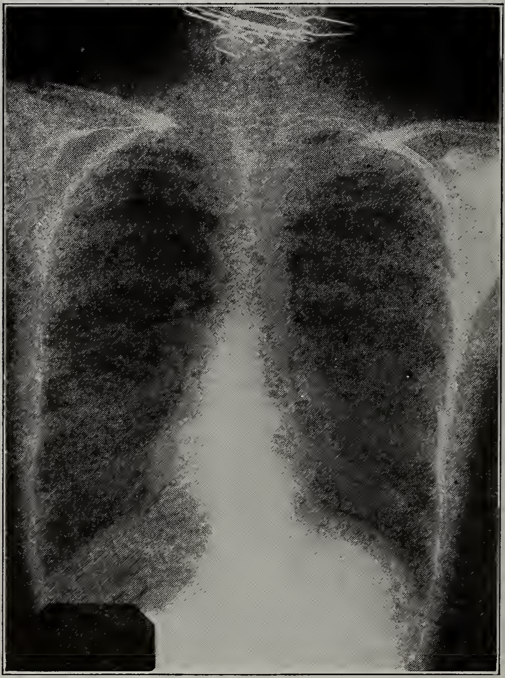

Fig. 1. Nov. 11, 1935, showing normal lung.

Submitted April 17, 1941.

six to eight days and their passage through the lung is responsible for the transient inflammation. In my opinion, this interpretation is incorrect: it is true that larvae of ascarides pass through the lungs—an interesting fact that was discovered by Japanese authors. But it is more probable that, when ascarides are found at the same time as a Loeffler Syndrome, the latter is an allergic reaction against the ascarides. Such a reaction may be extremely violent. I recall a zoologist who, whenever he crossed his laboratory while ascarides were being worked upon, infallably reacted with allergic rhinitis and conjunctivitis.

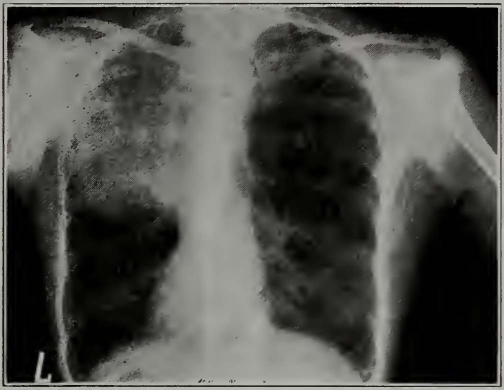

Fig. 2. Dec. 27, 1937, first appearance of edema; dense shadow.

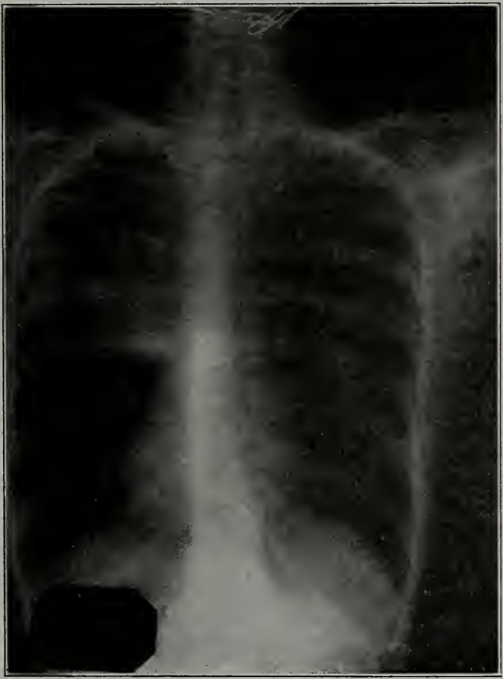

Fig. 3. Dec. 29, 1937, spotted and less dense shadow.

SUMMARY

1. This case of transient edema represents a typical Loeffler Syndrome.

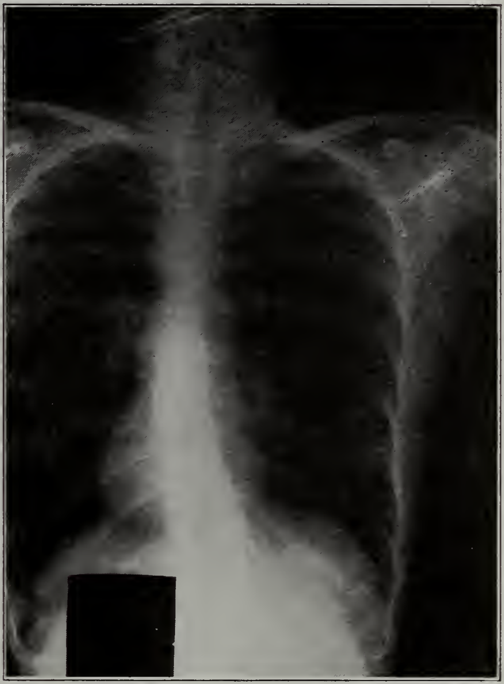

Fig. 4. Jan. 18, 1938, normal pulmonary shadow.

2. As the condition occurred in an asthmatic, it further suggests that it is a phenomenon related to the field of allergy.

3. The phenomenon gives rise to a series of striking X-ray pictures without which the condition would escape clinical attention.

4. To prevent diagnostic errors it is important to be acquainted with this phenomenon, for it brings the awareness that in case of sharp contradiction between the X-ray picture and the other findings, one single X-ray picture is not conclusive.

1661 Eleventh St.

Epilepsy as a Traffic Hazard

As a road hazard the danger of epilepsy lies not in the frequency of its occurrence, but rather, like lightning, in its suddenness and unpredictability. There is a real need for uniform regulations in all states with regard to the operation of motor vehicles by individuals who are subject to seizures, and these should be according to a plan which will not only insure maximum safety for the patients as well as others, but also one which would give physicians a means of adequately discharging their obligation both to the patient and to the community.—L. E. Himber, M.D., Ann Arbor, Mich.; Jour. Mich. S.M.S., Vol. 40, No. 9, September, 1941.

A Case of Staphylococcus Septicemia Treated With Sulfamethylthiazol

A. GLORIG, M.D., AND H. H. ENGLANDER, M.D.

THE treatment of staphylococcus septicemia has always been a grave problem. Mendell,[1] in 1939, reviewed 35 cases with six recoveries, and he declares it to be the most deadly of all septicemias with a mortality rate reported variously as from 70 to 90 per cent. The survival of six cases in 35, or 17 per cent, in his series was achieved by employing all the then known methods of therapy. Among the methods employed by Mendell was the use of staphylococcus antitoxin. He achieved poor results in the three cases in which he employed it. However, Julianelle[2] reported the use of specific rabbit antisera in 17 cases in which he had seven survivals; but his technique in preparation and use of the sera is meticulous and difficult to duplicate. Baker and Shands[2] reported a series of 103 cases in which staphylococcus antitoxin was tried. In the 47 cases in which the antitoxin was employed, the mortality rate was 38 per cent; in the control group of 56 cases the mortality rate was 76 per cent.

The other most promising method for treating staphylococcus septicemia was with bacteriophage. McNeal[1,5,6] reported 25 survivals in 74 cases which he and his co-workers personally observed. Meleney[7,8] reported with his newer and more potent bacteriophage, prepared in 1936, a mortality of 28.6 per cent in 21 cases; but admitted that the bacteriophage he used prior to 1936 was ineffectual.

Even with these methods of treatment available, as Mendell points out, the treatment of staphylococcus septicemia has been unsatisfactory. It still depends mainly upon supportive therapy and attempts to remove the foci of infection. Consequently, with the advent of chemotherapy, the various sulfanilamide derivatives, as introduced, were tried in staphylococcus infections. Scattered successful results have been reported with the use of sulfaypridine by such workers as O'Brien and McCarthy,[9] Maxwell,[10] Abramson and Flacks.[11] However, at the Mayo Clinic, Pool and Cook,[12] and Helmholz[13] discovered sulfamethylthiazol and sulfathiazol to be more active against staphylococcus infections, both in vitro and in vivo, than sulfapyridine; and of the two Rake and McKee[14] found sulfamethylthiazol the more potent. The efficacy of sulfamethylthiazol clinically has been demonstrated by Herrell and Brown,[15] Kelliher and Carlen,[16] and Carroll[17] and his fellow workers. However, the total number of cases reported are few in number, and, therefore, it has been thought worthwhile to report this case.

The Authors

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- **Dr. Englander,** East Cleveland, Ohio, is a graduate of Western Reserve University School of Medicine, 1938; house officer, Boston City Hospital, Medical Service, 1941-42.

I. M., a 2½-year-old white female, entered Willard Parker Hospital 2/25/40. She became ill with malaise and fever five days previously, and had a cough and rhinitis for four days. The day before admission a rash was noted on her body, and she became delirious. At this time it was noted that the tissues around her right eye were swollen and puffy. She was seen by a local physician, and was sent to Willard Parker Hospital as Scarlet Fever.

The child was well developed but apparently undernourished. She was acutely ill, feverish, semi-comatose, and dehydrated. Her skin showed a generalized punctate erythematous rash. Her right eye was closed with edema below and medially. There was a horizontal nystagmus, and her pupils reacted sluggishly to light. The ears presented a catarrhal otitis media; there was a profuse muco-purulent nasal discharge. Her palate displayed a punctate enanthem, and her tongue was of the strawberry type. A rough neurological examination revealed as the only positive finding, aside from the semi-comatose condition, a slight resistance to flexion of the head. The remainder of the physical examination was negative.

On admission her temperature was 104.4°F.; pulse, 130; respirations, 28. Her blood showed 26,000 W.B.C. with 83 per cent PMN's and 3,400,000 R.B.C. Both her nose and throat cultures showed staphylococcus aureus. Diagnosis on admission was Scarlet Fever, Ethmoiditis, and possible Meningitis. Treatment on admission was supportive plus 30 cc. of Scarlet Fever convalescent serum intravenously and 4,500 U. Scarlet Fever antitoxin intramuscularly. In addition, nasal suction was ordered.

The morning after admission, 2/26/40, she appeared much better with no meningeal signs or symptoms, but she still retained the signs of ethmoiditis. Her temperature on that day was as low as 100.4°F. The next day, 2/27/40, her temperature rose to 104°F. Her ethmoid signs were prominent and her neck was moderately rigid, but no pathological reflexes were noted. A blood culture taken at this time was later returned positive for staphylococcus aureus.

On 2/28/40 her temperature was still 104°F.; her white count was 26,000 with 89 per cent PMN's; her red count was 4,560,000 with 70 per cent hemoglobin. At this time sulfanilamide therapy was started: 30 grains initially followed

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Submitted March 20, 1941.

by 5 grains every four hours. This was increased to 15 grains every four hours the next day. She retained her high temperature despite the sulfanilamide, and on 2/29/40 she was noted to be lethargic and to have a blank stare. Her neck was more rigid than formerly, but again no pathological reflexes were noted. The eyes apparently showed some difficulty in vision, not following light, and there was paresis of the right external rectus muscle. Also it was noted that her left wrist was swollen, hot, and tender. A spinal tap at this time showed cloudy, ground glass fluid under increased pressure. No organism could be demonstrated in the fluid, nor was any demonstrated subsequently either by smear or culture. Sugar was normal; albumin, 2 plus; 2,000 cells per ccm., 95 per cent PMN's, were recovered. Blood culture taken at this time was again positive for staphylococcus aureus.

She retained this picture of meningitis with a positive blood culture, temperature of 104°F., and a pulse as high as 160. On 3/1/40 a right ethmoidectomy was done. At operation it was found that the bone in the upper part of the lacrymal groove was soft, and that there was pus present. Staphylococcus aureus was cultured.

By the next day, 3/2/40, the eleventh day of illness, the report of the blood culture was known, and since staphylococcus aureus had been recovered, she was started on sulfamethylthiazol therapy, 1 gram every four hours. By that time she had received about 16 grams of sulfanilamide, and had blood concentration of 10 mgm. per cent, but with no benefit.

Once the sulfamethylthiazol therapy was begun, improvement was steady. Her temperature gradually fell from 104°F. on 3/3/40 to 100°F. on 3/7/40; and her white count, from 45,000 with 82 per cent PMN's to 12,000 on 3/18/40, and 9,000 on 3/21/40. Her blood culture was still positive on 3/6/40 (10 colonies per cc.), but her spinal fluid on 3/5/40 only showed 40 monocytes per ccm. On 3/10/40, the nineteenth day of illness, sulfamethylthiazol treatment was discontinued because her hemoglobin had fallen to 65 per cent and red count to 2,900,000 while many nucleated RBC's with achromia, anisocytosis, and slight poikilocystosis were seen. By this time 48 grams of sulfamethylthiazol had been given.

On 3/13/40 her temperature was 104°F., but fell to 101°F. by 3/16/40. However, by this time (3/11/40) her blood culture was negative, and her spinal fluid was clear showing less than 10 cells per ccm. Moreover, there was some explanation for this hyperpyrexia in that on 3/14/40 she was found to have X-ray evidence of an osteomyelitis of the left ulna although her first plate on 3/1/40 showed no pathological change in the bone. At this time, when the roentgenologist discovered the osteomyelitis, she had no local clinical evidence of it. As treatment for her osteomyelitis, the principles of conservative therapy, as stated by Beekman and Sullivan,[7] Robertson,[18] and others, were employed. Her left arm was immobilized in plaster, and she was continued on supportive therapy.

Other treatment besides the chemotherapy, the ethmoidectomy, and the immobilization of the forearm was supportive. She was given parenteral fluids; and during the acute course of her illness, from 3/2/40 to 3/18/40, she was given many small transfusions reaching a total of about 1,000 cc. of blood. In addition, she was given iron therapy, and by the time of discharge, her red count had reached 4,000,000 with 77 per cent Hb.

After the osteomyelitis was discovered she convalesced satisfactorily except for an intercurrent infection with Varicella. Her osteomyelitis, however, continued to progress, but systemically she became well, and was discharged on 4/13/40, her fifty-third day of illness.

SUMMARY

(1) A brief history of the treatment of staphylococcus septicemia is presented, pointing out the high mortality rate, the generally unsatisfactory methods of treatment, attempts at specific treatment with antisera, bacteriophage, and finally chemotherapy.

(2) A case of staphylococcus septicemia with sterile meningitis, secondary to ethmoiditis, treated successfully with sulfamethylthiazol, is presented. This case also had an ethmoidectomy and supportive therapy, and was left with an osteomyelitis; but it was felt that sulfamethylthiazol played the deciding role in sterilizing the blood stream, and in saving the life of the child.

(3) The only toxic manifestation of sulfamethylthiazol noted in this case was depression of hemoglobin and the red count with the production of nucleated red cells and poikilocytosis, anisocytosis, and achromia. No peripheral neuritis occurred.

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The Influenza Epidemics of 1918 and of 1941

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IT has long been recognized that epidemics of influenza occur in periodic cycles. Studies of these cycles have made it possible to predict, with a considerable degree of accuracy, just about when another epidemic is due. Particularly noteworthy in this connection are the comprehensive studies of Webster.[1]

In 1939, on the basis of his observations of the periodicity of influenza, Webster was able to predict that the next likely period for a major epidemic peak would be February, 1941. Allowing for a variation of a month or so either way, his prediction was remarkably correct. The epidemic arrived on time.

A comparison of the current influenza epidemic with previous epidemics, particularly that of 1918-1919, will readily indicate the progress made in this period of more than two decades. Sufficient data on the 1941 epidemic, at least in the United States, have been reported to make such a comparison both interesting and informative.

It has already been observed, for example, that with certain important differences the current influenza epidemic is following the same general basic pattern of previous epidemics in both its clinical and epidemiological characteristics. However, the 1941 type of influenza is a much milder form of the disease which caused such devastation in 1918-1919 and in other major epidemics. Comparatively few deaths have been reported, even though the rate of spread has been almost as rapid.

ORIGIN IS SHROUDED IN OBSCURITY

During the past 22 years considerable basic information concerning the causal agent has been accumulated and many old views have been discarded. Moreover, it has been possible in the 1941 instance to locate the origin of the epidemic which has swept this country.

Pertinent to this last point and the comparison under discussion is Jordan's[2] statement: "The 1918 pandemic of influenza resembles all previous pandemics of this disease in that its origin is largely shrouded in obscurity. . . . It probably never will be possible to fix one definite starting point for the 1918 pandemic, if indeed a single starting point existed."

In the 1941 epidemic, however, it seems quite apparent that the influenza came to the United States from the Far East. It is known that the disease appeared in Hawaii and then on the Pacific Coast before spreading to the Middle West and the eastern sections.[3]

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Clinically, the most outstanding characteristic of influenza is its sudden onset accompanied by such symptoms as fever, fatigue, prostration and aches and pains in the head, back and extremities. The duration of the acute stage is usually short, seldom more than a week, but is frequently followed by a disproportionate period of exhaustion and weakness. Catarrhal symptoms may or may not be present.

The disease may occur in a variety of forms ranging from severe to mild. In its mild form, influenza symptoms do not differ greatly from "grippe" or a severe cold. The severe form, usually observed during pandemics as that of 1918, 1890 and 1847, is marked by high fever, severe muscle pains, prostration and weakness. There is an increased liability to pneumonia and to bronchitis, sinusitis and ear infection. Such epidemics of influenza are outstanding by their rapid spread, the severity of individual cases, frequency of pneumonia as a complication, and high attack rate, and, in the case of the 1918 epidemic at least, by the high mortality rate.

The type of influenza prevalent during the 1941 epidemic is apparently a form somewhat intermediate between the severe and mild types of the disease.

Influenza, per se, is rarely fatal unless followed by complications from secondary infections. Of these, pneumonia is undoubtedly the most frequent cause of death and was the prime factor in the high mortality rate of the 1918 epidemic. Jordan has observed that "there is no doubt that in nearly all fatal influenza there is a pneumonic process in the lungs. . . ."

This authority has estimated that the total mortality from the pandemic of influenza for the years 1918 and 1919 was probably at least over twenty-one millions. He cites the estimate of the U. S. Bureau of the Census, which indicates that the toll in this country was approximately 548,452 deaths for a ten-month period during 1918 and 1919.

Submitted April 16, 1941.

The low mortality rate noted during the 1941 influenza epidemic is evidently attributable to two factors. One is the comparatively milder form of the disease. The second factor, and one that is of unquestioned importance in this and future influenza epidemics, is the development during recent years of pneumonia controlling and specific biologicals and drugs. The availability of specific type sera, and more especially the drugs of the sulfanilamide group, particularly sulfapyridine and sulfathiazole, have tremendously reduced the mortality from pneumonia and hence from influenza.

Referring to influenza itself, there can be no doubt that the greatest advance in knowledge of the etiology of the disease was the discovery by Smith, Andrewes and Laidlaw[4] in 1933 that a virus is the responsible causal agent. In this they confirmed a suspicion long held by many investigators.

There is evidence that progress in the study and treatment of influenza had been greatly hampered by the old bacterial concept. Although many organisms had been considered as probable causal factors in the etiology of influenza, for many years and during the 1918 epidemic it was generally held that the Pfeiffer bacillus is the responsible agent. Indeed, the Pfeiffer group of organisms is frequently referred to as the "influenza bacilli."

But increasing evidence accumulated to cast doubt on the importance of this group of organisms in influenza. Its presence in the respiratory tract in diseases other than influenza and in the mouths of apparently healthy individuals, and its absence in many cases of influenza, led pathologists to seek further, particularly in the virus field.

However, according to Horsfall,[5] it was not until Smith and his associates "satisfied certain essential criteria" that the virus concept received credence as the etiological agent in influenza. During the years since that discovery, numerous influenza epidemics in all parts of the world have enabled investigators to isolate many strains of this virus from patients with the disease. The evidence indicating an etiological relationship is overwhelming. However, some workers in California and in England have failed to recover this virus during certain influenza epidemics.

ETIOLOGICAL AGENT IN INFLUUENZA

It became increasingly evident that in some influenza epidemics the etiology of the virus is regularly demonstrable, while in others no etiological relationship can be proved. This strongly indicates that influenza epidemics are not always caused by the same agent.

The situation has been summed up by Horsfall[5] thus: "Despite the fact that the various clinical epidemiological manifestations of the disease may be nearly identical in two separate epidemics, it does not follow that the causal agents are similarly related."

In view of the foregoing and the very definite probability that other causal agents would be discovered, the leading investigators of influenza in the United States and England felt it advisable to adopt a more precise terminology to avoid confusion. Members of the International Health Division of the Rockefeller Foundation and of the National Institute for Medical Research of London[6] have agreed that, if and when the causal agents of the several possible influenzas are discovered, they should be designated by identifying letters.

CLASSIFICATION

Thus, the classification Influenza A has been assigned to a "specific disease entity caused by infection with any one of the various strains of the virus discovered by Smith, Andrewes and Laidlaw (1933) which will hereinafter be termed influenza A virus."

That this decision to establish such a classification was well founded was quite promptly proved by the work af Francis.[7] In November, 1940, this investigator reported the isolation of a new type of virus from epidemic influenza. Following the new classification, he designated it Influenza B. Although this virus represents a serologically distinct entity, the epidemic disease associated with it appears to be as typical of epidemic influenza as that prevalent in outbreaks from which strains of influenza A virus were obtained.

According to Francis, "the two infections apparently possess independent cycles, but until further differential studies are made they should both be considered epidemic influenza caused by viruses of different serological types."

The question of immunity is also much clearer in 1941 than it was during the 1918 influenza epidemic. However, most of this knowledge is at present limited to influenza A. Horsfall[5] has pointed out that, unlike other virus diseases, it does not appear that immunity follows an attack of influenza A virus.

"The increased concentration of circulating antibodies," he reports, "which follows an attack of influenza A does not persist indefinitely but instead decreases progressively until after a period of between eight months and a year the titer of the antibodies has returned to almost the initial individual level."

Moreover, the possession of such antibodies is no assurance of immunity against influenza A since it has been shown that at least 95 per cent of human beings have demonstrable antibodies. However, there is some evidence that, when there is higher concentration of neutralizing antibodies, there is a greater probability of immunity to influenza A.

Individuals who have been exposed to influenza do not always develop the disease. This can be explained, in part at least, by the observations reported by Francis[8] early in 1940. He found that a substance exists in the nasal secretions of humans which is capable of inactivating relatively large amounts of influenza virus, this inactivating capacity varying widely in different individuals. It is highly probably, he states, that this factor is of considerable importance in relation to individual susceptibility to epidemic influenza.

In 1927, in the preface to his survey on "Epidemic Influenza," Jordan[2] wrote: "In the face of the almost certain recurrence some day of another worldwide pandemic, we remain nearly as helpless to institute measures of control as we were before 1918."

At present, in 1941, despite vastly increased knowledge of the etiology of influenza, and with the exception of the availibility of sera and the sulfanilamide drugs for treating postinfluenza pneumonia and the like, the situation is practically the same as indicated by Jordan. In some respects it may be said to be even worse; for not only, as in 1918, are millions of men crowded in camps and industrial centers, but also increased transportation and travel facilities can spread the disease faster and farther.

As in 1918, there is no proved, effective vaccine or other prophylactic measure against influenza. Many attempts have been made to produce a vaccine that will induce active immunity to influenza, but without success. However, considerable promise lies in the work of Horsfall and Lennette,[9] who have obtained a complex vaccine which is said to be effective against different strains of influenza virus. This vaccine was originally prepared from ferrets that had suffered from a mixed infection of influenza virus and canine distemper virus. Tests on a group of human volunteers with a similarly prepared vaccine have produced "a definite increase in antibodies neutralizing influenza virus in every instance." Work on this vaccine is still going forward and more conclusive evidence will probably be forthcoming.

PREVENTIVE MEASURES

Despite this, avoidance of infected places and persons, plus common sense, hygienic, dietary and physical measures, still constitute the only useful preventive measures against influenza.

Influenza cannot be diagnosed with certainty on clinical grounds alone, and unfortunately no rapid, simple and accurate laboratory method of diagnosis has yet been devised. Such tests as have been proposed, e.g. complement-fixation tests, take at least 10 days to two weeks and require skill of a high order. They are not practical.

Therefore, it is evident that the knowledge and experience of the physician still remain the most important factors in diagnosing epidemic influenza and differentiating it from the many other upper respiratory tract infections and the so-called "febrile catarrhs." Francis[10] has emphasized the fact that epidemic influenza may be clinically differentiated from febrile catarrhs by its essential clinical characteristics.

Briefly summarizing the differences between the influenza epidemics of 1918 and 1941, it may be said that during the intervening years knowledge concerning the etiology and spread of the disease has been greatly augmented. The dangers of secondary infection and the mortality resulting from such infection have been greatly lessened by the development of new and powerful therapeutic agents. Research gives promise of a really effective vaccine. However, even with these notable advances, there is not yet available any substance which can specifically cure or prevent influenza. Nor is there any procedure which will speed or simplify diagnosis.

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Metabolic Aspects of Rheumatoid Diseases

Disturbances of endocrine balance and function are not uncommonly observed among subjects of rheumatoid disease. As noted before, a small number of the patients with rheumatoid disease having decreased basal metabolic rates have real hypofunction of the thyroid, and in them rheumatoid complaints are corrected by thyroid therapy. It is also notable that among patients presenting menopausal symptoms 50 per cent suffer from rheumatoid complaints. Hypertrophic arthritis occurs chiefly at the age when gonadal involution occurs. The subjective symptomatology frequently varies periodically in women, suggestive of some relationship, though perhaps not specific, to the menstrual cycle. This may be secondary to the water shifts already referred to. Pregnancy intervening in the course of an atrophic arthritis is sometimes associated with an arrest of the clinical activity of the arthritis. The disturbances in water metabolism and skeletal deviations are conceivably referable to dysfunction of the posterior and anterior portions of the pituitary respectively.—C. Wesler Scull, Ph.D., Abington, Pa.; Pa. Med. Jour., Vol. 44, No. 10, July, 1941.

Clinically Obscure Polyserositis With Silicosis

CARL VILTER, M.D., AND ROBERT RITTERHOFF, M.D.*

CASE 15448. A thirty-four-year-old, white, married man, was admitted to the Cincinnati General Hospital on January 28, 1941, complaining of cough, shortness of breath and weakness, increasing over the prior four weeks. For the previous year he had experienced unwonted dyspnea on exertion, frequent chest colds, an intermittent non-productive cough, and occasional night sweats.

History: Four weeks prior to admission the patient noted the acute onset of "inflammatory rheumatism" involving the joints of the hands, the elbows, and knees simultaneously; these were described as hot, red, tender, and somewhat painful on motion, and, although the symptoms persisted about a week, he was able to continue his work. About the same time he developed a severe cough productive of approximately 3 oz. of thick, yellow, tenacious sputum per day. This was accompanied by pleuritic pain in the left anterior chest and right posterior chest. These symptoms were associated with malaise, increasing weakness, anorexia and mild cramping pains in the right lower quadrant. During this time there was a patchy loss of scalp hair. There were no chills, no urethral discharge and no fever. One week before admission he ceased work because of weakness, the increasing severity of dyspnea, and the onset of orthopnea. He was, however, able to enter the hospital on foot. The past history and review of systems were irrelevant. For the past 16 years he had been employed in a pottery plant where he worked usually with the wet clay or a porcelain spray. There was no known contact with tuberculosis.

Physical Examination: Temperature 103°. Pulse 120. Respirations 29. Blood pressure 130/70. The patient appeared acutely ill. He was orthopneic and the face was flushed, the skin moist and warm; no petechiae or eruptions were present. Over the scalp were patches of alopecia areata. The head, eyes, nose, and mouth were not remarkable. Both tympani were somewhat scarred. The oral pharynx was moderately reddened; no exudate was present. There was moderate cervical, axillary, and inguinal adenopathy. The neck veins were not distended. Respirations were shallow, labored, and increased in rate, demonstrating some intercostal retraction. The chest was of emphysematous contour with flared costal margins. Rhonchi were audible and palpable throughout. The percussion note was dull over the right lateral chest extending into the axilla and here breath sounds were suppressed. At all other points breath sounds were bronchial in character. Coarse and medium rales were heard throughout all lung fields. Examination of the heart revealed no P.M.I. or A.I. No enlargement was detected by percussion. The rhythm was regular but because of the respiratory noises the quality of sounds and presence of murmurs could not be determined. It was thought by some observers that there was a harsh systolic murmur at the apex. The abdomen was splinted in continuous respiratory effort and no abnormalities were noted save questionable right lower quadrant tenderness. The genitalia were normal and digital examination of the rectum negative. The superficial abdominal and the Achilles reflexes were not present.

Laboratory Findings: The erythrocyte count was 4.0M, with 14 grams of hemoglobin; the leucocyte count was 17,000 with a differential count of Pmn. 62 per cent, Lym. 19 per cent, and Mono. 7 per cent. The urine was not remarkable except for a 1+ albumen and a few hyaline casts. The sputum, which amounted to 1-2 oz. daily, varied in character, at times being white and foamy, and sometimes thick, yellowish and viscid. No tubercle bacilli were noted on four examinations. A type XX pneumococcus was recovered from the sputum only after culture on the second hospital day. There was no predominant organism on direct smear. The Blood Kahn was anti-complementary. A blood culture taken on the second day showed a small gram-positive rod which was discarded by laboratory technicians as a contaminant. Subsequent cultures on the third and fourth days were negative.

A stereo X-ray of the chest on the day of admission was read as follows: "The heart is somewhat enlarged. The greatest transverse cardiac diameter is approximately 14.5 cm. in a chest of approximately 26 cm. The aorta is elongated. Increased markings are seen radiating from the hila toward the bases. There is a mottling throughout both lung fields, with many small, rounded areas of increased density. There appears to be infiltrate in the fourth interspace on the right, and some questionable infiltrate around the left hilum. The findings are thought to represent a disseminated tuberculous spread, with the possibility of silicosis to be strongly considered. There appears to be some prominence in the region of the pulmonary conus."

Hospital Course: On the second day respiratory distress was even greater and the temperature ranged between 103° and 104.6°. At this time the patient was started on a course of sulfathiazole, 1 gram every four hours. On the third day there was no improvement and it was thought that there was a moderate amount of fluid in the right thorax. Only 35 cc. of golden clear fluid containing 21,000 leukocytes per cu. mm. (60 per cent Pmn.) were recovered. Culture of the fluid was negative and guinea pig innoculation resulted in death of the animal in 30 days without evidence of tuberculosis. Two subsequent taps yielded no fluid. On the fourth day nasal oxygen was given the patient (and continued until death) because of greater difficulty in breathing, cyanosis, and marked abdominal distention. Only slight relief of symptoms was noted. Despite treatment with sulfathiazole, with maintained blood levels of 2.3 to 7 mg. per cent, the temperature continued to rise to 105°-106° until the evening of the fourth day when the patient appeared moribund and was quite irrational. During the night, however, the temperature fell to normal; still the pulse was maintained at the previous high rates of 120-160. The following morning the patient seemed stronger. Examination showed no change in the previous findings.

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This is the fifth of a series of "Case Records Presenting Clinical Problems," selected by Dr. R. S. Austin, Professor of Pathology, University of Cincinnati College of Medicine.

Thereafter the temperature varied between 101° and 104°. On the ninth day the patient was still in relatively the same condition but the white blood count had dropped to 8,000. The blood pressure was 130/100 and there was a marked pulsus paradoxus. There was no pericardial friction rub and no signs of heart failure. On this day sulfathiazole was discontinued after an aggregate dose of 51 grams, in order to evaluate the possibility of drug toxicity.

In February a portable chest roentgenogram was reported as follows: "Portable film—does not allow for accurate comparison in regard to cardiac size. However, the impression at this time is that the heart is enlarged over the previous examination. Both hilar shadows are markedly accentuated, with homogeneous densities extending out from both. The peribronchial markings are exaggerated throughout both lung fields and there is also thought to be interstitial infiltrate. There is pleural thickening over the left lateral chest and a more homogeneous density over the left lower lung field, probably due to pleural thickening. The findings could all be based upon a peribronchial and interstitial pneumonia, with congestive changes. Also the possibility of an infarct over the left lower lung field cannot be completely ruled out. The previous films on 1-28-41 suggest disseminated tuberculosis as one of the possibilities in a differential diagnosis. Final conclusions cannot be drawn at this time, although the former diagnosis is thought more likely (bronchopneumonia, with congestive change.)"

During the subsequent days, approaching death on the sixteenth day, the patient grew visibly weaker. On the twelfth and fourteenth days the leucocyte count was reported as 10,200 and 28,650 respectively with a predominance of neutrocytes. Respirations continued to be weak, shallow and at rates of 30-50 until death which was apparently due terminally to respiratory failure.

Clinical Impressions: Silicosis; miliary tuberculosis; diffuse bronchopneumonia of undetermined etiology.

Necropsy (N-41-82): Performed seven and one-half hours post mortem by Dr. Herbert Shanes.

Gross Examination: The lungs, 625 grams and 810 grams, right and left, respectively, were covered by generally glistening thin pleura, which, however, presented focal areas of dense white adhesions. Dissection revealed dark red, wet, subcrepitant tissue throughout the left upper lobe, and similar areas in the upper and lower lobes of the generally crepitant light red right lung; that of the left lower and right middle lobes was grayish-pink and crepitant. No areas of definite consolidation were noted; small areas, however, suggestive of early lobular pneumonia were thought to be present in the left upper lobe. Numerous firm black, sharply demarcated, slightly elevated, discrete nodules, varying in size from 1 to 3 mm. in diameter, were uniformly distributed throughout both lungs and the visceral pleurae. Generally, these nodules had a whorled appearance, were surrounded by a thin zone of coarsely lacy lung tissue, and occasionally presented punctate white centers. Firm, gray, and grayish-yellow nodules 1 to 2 mm. in diameter, having a similar distribution, were present to a lesser extent. The enlarged tracheobronchial lymph nodes and those about the thoracic portion of the aorta varied from 4 to 5 cm. in length and 2 to 3 cm. in width, and on section presented rubbery, anthracotic substance, having a whorled confluent nodular structure flecked and streaked with soft yellowish-white areas. The pericardial sac was obliterated by brownish-yellow fibrinous exudate which in some areas measured 5 mm. in thickness and focally enmeshed small quantities of straw colored fluid. The heart and adherent pericardium weighed 425 grams. However, the other measurements and the gross appearance were normal. The only abnormality noted was several small atheromatous plaques at the base of the mitral valve leaflets. Greenish-yellow fibrinous material covered the entire liver and was loosely adherent to similar exudate on the serosa of the posterior surface of the distal portion of the stomach and to the parietal peritoneum of the right upper quadrant. Several small, firm, white nodules, 1 mm. in diameter, were embedded in the shaggy exudate on the parietal peritoneum. The remainder of the peritoneal cavity was free from evidences of inflammation, and the gallbladder and stomach presented no apparent abnormalities. The gastric and hepatic lymph nodes were moderately enlarged and on section presented soft grayish-black substance. The brain weighed 1600 grams and was remarkable only for parieto-frontal macrogyria and questionable focal encephalomalacia in the left cerebellar hemisphere. The other principal viscera presented no evident pathological changes.

Microscopic Examination: Representative lung sections presented essentially the same processes, varying only in degree. A moderate number of sharply delimited, discrete and occasionally confluent, fibrotic nodules were scattered throughout the lung framework, and to a lesser extent in the visceral pleura. These nodules were composed of interlacing whorled bands of collagen arranged about small hyalinized vessels. Small areas of ischemic necrosis, as evidenced by granular disintegration of the collagen, occupied the centers of some of the nodules. Most of these nodules had cuffs of pigmented epithelioid cells and occasionally were surrounded by dilated alveoli. Elsewhere there were perivascular and peribronchial cellular aggregates of pigmented epithelioid cells accompanied by slight coarse fibrosis.

There was intense neutrocytic and monocytic infiltration of the entire lung substance, involving the alveolar walls, the bronchi and bronchioles, and the interlobular septa which were very edematous. This interstitial reaction was far in excess of the general minimal exudate in the alveoli, in which, along with similar reacting cells, there was present some fibrin and a few "heart-failure" cells. The alveolar walls were hyperemic and focally thickened by numerous fibrinoid deposits, particularly affecting the walls forming the atria and sacculi. In these latter areas the reaction was more marked and attended by some necrosis. Focally the alveoli were packed with fibrin, neutrocytes and monocytes and in these areas there was early necrosis of the exudate and of the thickened fibrinoid alveolar walls. The pleura was focally thickened by loose fine collagen, throughout which there were numerous congested capillaries and a slight monocytic reaction. Other areas of the pleura presented marked focal monocytic reaction. The tracheobronchial lymph nodes were replaced by numerous confluent fibrotic nodules, similar to those in the lungs. However, here, the central areas of ischemic necrosis were more extensive and focally calcified.

The fibrinopurulent serositis affecting the pericardium, peritoneum of the right upper quadrant, and the capsule of the liver was well established, as the deeper portions consisted of rather cellular, faintly staining collagen throughout which there was moderate monocytic reaction. More superficially there was marked fibroblastic activity, endothelial proliferation, and numerous large hyperchromatic mononuclear cells many of which had pyknotic nuclei. A wide zone of fibrin formed the superficial layers, throughout which there was intense infiltration of neutrocytes and large mononuclear cells and small necrotic foci. An occasional large multinucleated cell was present; however, there were no Aschoff nodules or evidences of a tuberculous process. Several arteries in the spleen and liver had focally hyalinized necrotic walls and were surrounded by marked cellular reaction similar to that seen in the serous membranes. There was a general increase in collagen about the central arterioles of the spleen and in the portal areas of the liver. In these latter areas there was only slight monocytic reaction.

Multiple sections of myocardium revealed no stigmata of a past or present rheumatic process. However, there was slight diffuse thickening and focal calcification of the left atrial endocardium. A focal area of acute interstitial myocarditis characterized by neutrocytes, monocytes, and proliferation of the myocytes was encountered. The nuclei of the muscle fibers were enlarged, hyperchromatic and had "squared ends."

Sections of the parietal cortex presented a diffuse patchy loss of nerve cells with attendant disruption of the cytoarchitecture, particularly in the outer three layers where many of the cells were hyalinized. There was a slight generalized increase in the glial cells throughout the section, and there was some satellitosis and neuronophagia. These changes were more marked in the left parietal cortex. A section taken from the area of questionable left cerebellar softening presented swelling, chromatolysis, and occasional loss of Purkinje cells. There was, also, some focal loss of cells and areas of rarefaction in the molecular and granular layers. There were several small perivascular hemorrhages. Pericellular and perivascular edema was present in both the cortex and cerebellum.

The principal pathologic diagnoses were: Organized and organizing fibrinopurulent polyserositis; acute lobular pneumonia and acute interstitial pneumonitis; acute focal interstitial myocarditis; subacute focal hepatic and splenic arteritis; acute encephalosis; discrete pulmonary silicosis; chronic passive congestion of the viscera.

DISCUSSION

The salient pathological findings are those of a diffuse persistent infectious disease which has some resemblance to a rheumatic process, namely, polyserositis, atypical pneumonia, and focal arteritis. Clinically, this would tend to be substantiated by the history of "acute inflammatory rheumatism" four weeks prior to the onset of the terminal illness; this symptom was originally interpreted as a manifestation of initial septicemia or bacteremia, the rheumatic state losing consideration because of the acuteness of the respiratory symptoms and the absence of other modalities of the diathesis. Miscroscopically, the lesions appear to be of an age compatible with the duration of the illness, dating the onset with the "rheumatic" attack. However, the absence of demonstrable recent or old rheumatic stigmata either in the heart or in the inflammatory lesions, makes this viewpoint untenable. The question has been raised as to whether the Aschoff nodule is modified by sulfathiazole; this, however, has not been demonstrated. Further, this case is similar to those antedating the use of the sulfonamides. There is no evidence of tuberculosis either microscopically or bacteriologically, nor could any other bacterial agent be demonstrated in the sections. This case should be classified as a subacute Pick's polyserositis with polyarthritis of undetermined etiology.

Correlation of the pathological and the puzzling clinical picture is quite revealing. Without trying to excuse the clinician for missing the primary diagnosis it might be said that more rigorous and frequent examinations which were considered too exhausting for so ill a patient, might have suggested the true nature of the disease. At all times the signs in the chest were indicative of a diffuse bronchopneumonia. Although heart failure and even pericarditis were considered clinically, there was no combination of findings to confirm the suspicion. The left anterior chest pain and the pulsus paradoxus could well have been signs of pericarditis; they were equally well justified by the diffuse pneumonic process, pleurisy, and marked aerodynamic changes in the thorax. The autopsy findings suggest a combination of these two causal factors. Because of the terminal dyspnea, moreover, it is believed that the marked cerebral degenerative changes were anoxic in origin. The abdominal distention was attributed clinically to toxicity, a state frequently noted in pneumonia, rather than to the perihepatitis discovered at the necropsy table.

The history of exposure to free silica dust over a 16 year period in a factory in which other cases of silicosis had been discovered helped identify the pulmonary lesions, which radiologically were compatible with either disseminated silicosis, miliary tuberculosis, or both. Because of the clinical course it was thought that both processes were present, and at autopsy, the gross findings were compatible with silicosis and superimposed hematogenous pulmonary tuberculosis and tuberculous polyserositis. However, microscopically, tuberculosis was not demonstrable, nor were tubercle bacilli found in the necrotic centers of the silicotic nodules in the lung or tracheobronchial lymph node. The diffuse silicotic lesions account for the exertional dyspnea present during the last year of life. Silicosis is now a reportable compensable industrial disease in this state. To establish the presence of this industrial disease in those still living, clinical and radiologic evidence is reviewed by the Silicosis Board of the Industrial Commission. In the event of death, clinical and radiologic evidence should be supplemented with the conclusive evidences of a complete necropsy with micro-incineration or chemical studies if necessary.

Tuberculosis Abstracts

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by Component Society, the Ohio Public Health Association

X-RAYING MILITARY MEN

After January 1, 1941, the Army assumed full financial responsibility for the roentgen-ray service in induction centers. The Department provided personnel for the interpretation of films. Since January 15 this service has also been taken over by the Army, which has assigned medical reserve officers qualified in this special field. The roentgenographing of National Guardsmen has been entirely at the expense of the Department of Health. Under existing regulations the Army could not pay for this service until after induction, and it was important that rejections be made before induction.

At the outset there were four induction stations. Since January 1, 1941, all work has been done in two stations, one in Manhattan and one in Queens.

Those rejected men who were residents of New York City were given an appointment within the next two or three days to appear at the Health Department's Central Chest Clinic, where a complete study of the case was made. If this examination proved the original findings to be of no significance, the local draft board was so notified.

Rapid roentgenographic service was necessary as the recruit was supposed to be cleared through all examinations by 2:30 p. m. of the day he reported at the induction station. With from 60 to 300 men per unit to be handled daily, even the rapid roll method used in the routine survey program was inadequate. Consequently a special type of apparatus was devised. A modification of the roll paper camera was used in connection with a specially constructed portable dark room measuring 8 by 8 feet with the back of the camera integrated into one side of the dark room. A signal device was installed between the roentgen-ray technician and the dark room. As soon as a film was exposed, the signal was flashed and the dark room crew cut off the film and placed it in the developing bath. The signal was then reversed indicating that another film was ready to be exposed. A team of three, consisting of a technician and two dark room assistants, were able to operate faster than one exposure a minute. The films were processed in large trays and from the fixing bath were passed out to the physician through a light-proof pass. After being read, the films were washed in a portable tank and dried in a special device designed for the purpose.

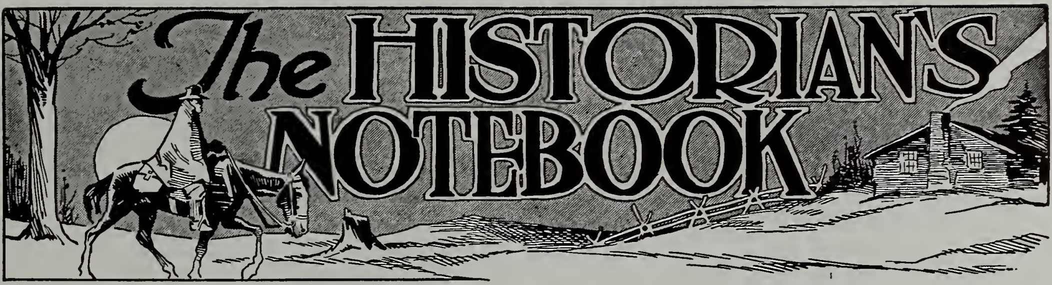
Acceptance or rejection was based on Army regulations. Men showing any form of reinfection types of tuberculosis were rejected because lesions of such types may become aggravated under conditions of military service. Primary lesions considered as active or extensive calcifications were likewise cause for rejection. Other forms of significant pulmonary disease, such as bronchiectasis, pneumonitis, atelectasis or extensive pleural changes, were cause for rejection until further study could determine their importance. Men with obviously abnormal cardiac silhouettes were reported to the medical examiners for such further study as might be indicated. Men with nothing more than apical caps, and those with small well-healed primary lesions were not rejected.

Of the inductees, 1.36 per cent were rejected and of the Guardsmen, 1.21 per cent. About one-third of the Guardsmen were below the age of 21, while only about 0.5 per cent of the inductees were below that age. An all-Negro regiment (National Guard unit) had the highest mean age in all groups and the highest rate of rejection, which was almost entirely on the basis of pulmonary tuberculosis. If the findings in this unit are subtracted from the totals of all Guard units a greater difference will be found between Guardsmen and inductees.

A detailed cost analysis of personnel, equipment and materials necessary to complete this study indicated a total of $23,614.20. Using this as a basis for computation, the unit cost to examine each individual by roentgenogram was $1.47. (The cost of taking a roentgenogram and its interpretation without any further follow-up was $13,911.20, or 58.8 per cent of the total.) The unit cost of rejecting a man for military service on the basis of the total cost was $106.02 for inductees and $122.37 for Guardsmen.

Spillman has reported that the cost to the federal government of accepting a person with tuberculosis into the armed service is $10,000. Thus, in these studies involving 41,819 inductees and 9,541 Guardsmen, or a total of 41,360 men, 561 persons with chronic pulmonary tuberculosis were rejected, representing an estimated saving to the government of $5,610,000.—Herbert R. Edwards, M.D., and David Ehrlich, M.D., Jour. of Amer. Med. Assn., July 5, 1941.

Tuberculosis as a cause of death among the wives of men who died of the disease is almost three times as high as it is for all women. Among sisters, the relative frequency is 2.3 times as high.—Antonio Ciocco, M.D., Human Biology, May, 1941.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

Jared Potter Kirtland, M. D.

Pioneer Naturalist of the Western Reserve

November 10, 1793 - December 18, 1877

GEORGE M. CURTIS, M.D.

A PORTLY old gentleman with a robust commanding physique was Dr. Jared Potter Kirtland of the eighteen seventies. So massive was his rotund frame that, to the unutterable delight of wide-eyed visiting youngsters, he would sit and read in those pre-Edisonian days, with a candle propped upon his powerful chest.

His home at East Rockport, Ohio, was surrounded by exotic shrubs and flowers, and known the country over for its unexcelled beauty. In fact, Kirtland's surroundings were quite consistent with his belief that esthetic influences are indispensable to man. For he held that the beauty of the home affects the character of those within:

> "The most homely log house, with its portals covered with the ever blooming honeysuckle, and some of the climbing roses, its ends deeply enshrouded with the luxuriant grape vine and the running **Ampelopsis**, over-shadowed with the native trees, or those that are fruit-bearing, presents more pleasing associations than the gaudily painted farm house, with its bare walls and windows casting their painful reflections full in our faces, without evidence that anything like correct taste can be found within.
>
> "We go so far as to say, it is our belief that these associations exert an immense influence over the character and dispositions of those whom they surround."

His own life of continued cheerfulness, of genuine affection for his fellow-beings, and of a deep appreciation for the lore of nature bore testimony to the fundamental character of this tenet.

Indeed, he carried this principle even further in his more generalized concept that environment and the man interact, the one upon the other. Thus, he comments in an article concerning the State Fair of 1859 by contrasting the "intelligent" crowd at the Fair with the "scum" gathering to view a man walk a rope extended over the falls at Rochester and again with the "ruffian element" witnessing "the barbarian act of hanging" at Columbus, Ohio:

> "The occasion, also, acts reciprocally in making characteristic impressions upon the crowds it gathers. The Rochester and Columbus crowds were strengthened and advanced in vice and degradation. On the other hand, not a man, woman, or child has left these Fairgrounds without gaining valuable knowledge, and of course advancing in happiness. These Fairs are great reformers and improvers."

Kirtland, too, powerful of mind and body though he was, could not escape his environment, nor his heredity. His father, Turhand Kirtland, was a descendant of the early American Kyrtlands, many of whom distinguished themselves in various pursuits. Turhand Kirtland became prominent, chiefly as one of the leading agents and surveyors of the Connecticut Land Company, which laid out many of the towns of the Western Reserve.

Most influential, however, in Kirtland's upbringing was his grandfather, Dr. Jared Potter, a distinguished physician of Wallingford, Con-

The Author

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Read before The Ohio State Archeological and Historical Society, April 4, 1941.

necticut. In 1803 Turhand Kirtland "went west" taking his wife and three younger children with him to the state of Ohio, then in its infancy. Ten-year old Jared Potter Kirtland was left in Connecticut with his grandfather in order that he might enjoy the advantages of the schools of that eastern fringe of educational opportunity. He could not have been entrusted to the care of a more capable person than Dr. Potter. And here lies the real secret of the pioneer naturalist, for grandfather Potter's philosophical ideals and the cultural background he provided formed a sturdy groundwork for the growing youth, and foreshadowed the achievements of the mature man.

EARLY INTEREST IN NATURAL HISTORY

Young Kirtland was a bright and eager student. He seldom engaged in games with other children, but for recreation sought out nature. His grandfather carefully guided him toward amusements of a fruitful character. Dr. Potter inculated in the boy a love for natural history, and taught him the habits of accurate observation and conscientious recording.

The growing lad became familiar with every bird and animal which frequented his youthful haunts. Together with Potter's other adopted grandchildren, he cultivated a garden in which grew many popular species of flowers of that period. At the age of twelve, Kirtland was already familiar with budding and grafting.

Together with gardens and farming lands, Dr. Potter had extensive orchards of white mulberry trees, grown for the cultivation of silk worms. Young Kirtland was later able to demonstrate by breeding experiments on the silk worms that the isolated female would lay eggs which would hatch the same as when she was domiciled with the male. This preceded by nearly 50 years Siebold's work on parthenogenesis.

In the spring of 1810, Kirtland, then an observant young man of seventeen, was requested by his father, who thought he was afflicted with a fatal malady, to come with due haste to Ohio. In May of that year he set forth with Joshua Stow of Middletown, Connecticut. The many natural subjects and historical sites on the way were a source of constant interest to Kirtland, during the entire duration of his lengthy journey.

The General Assembly, then in session at Hartford, was considering the Gargantuan debts to the State incurred by many of its prominent citizens in the purchase of the western New Connecticut. Shysters were prevailing upon the legislature promptly to foreclose the mortgages, an act which would have spread havoc throughout the state. However, they were defeated in their attempts.

At Buffalo Kirtland dissected many species of fish. The fishermen at first scoffed at this "Yankee greenhorn" who never before had seen a whitefish. Nevertheless, they were soon convinced that even such a youth could teach them new things about various fishes.

Kirtland, imbued with the progressive concepts of his grandfather, was sadly disillusioned when he met the Indians. For, at times he saw the Red Man, degraded by the chemical weapon of the White Civilization, engaged in bacchanalian orgies, or slumbering in a drunken stupor under the trees.

Desolation greeted the travelers in Pennsylvania. Clearings and farm-houses were abandoned. Discouraged and disconsolate farmers and their families drearily trudged onward, compelled to leave their homes because of defective or disputed titles to the land.

On June 11, 1810, Kirtland arrived in Youngstown, then a "sparsely settled village of one street, the houses mostly log structures, a few humble frame buildings excepted." After a dinner at the home of Dr. Dutton, one of Jared Potter's students, Kirtland and the doctor mounted their horses and rode on southward to Poland.

> "No bridges then spanned the Mahoning," writes Kirtland. "We passed over at Power's ford, the water high and muddy from recent rains; but the doctor pointed out a rock in the river, with its top barely above the water, which, he said, was an index that when the top appeared it was safe to ford the stream."
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> "On the Stambaugh farm, in Boardman, at the Four Corners, a small clearing, a fine young orchard and a log house were observed. A view over the Mahoning Valley, taken at that point embraced, at that day, an unbroken wilderness. The public highway to the village of Poland had been already effectually cleared, and parts thrown up as a turnpike, but was an universal bed of muck and mud."

Poland was a thriving village in 1810. Kirtland found his father at home and in good health. The tidings which had necessitated the lengthy journey proved false. The quacks of that day had conjured a malignant cancer from "a trivial scrofulous tumor." And with proper medical aid, Turhand Kirtland soon recovered.

The prominent citizens of Poland prevailed upon the welcome newcomer to fill the vacancy occasioned by the death of the schoolmaster. Kirtland accepted the post, in order to defray the expenses of his journey, and taught school there until late in September. The children, who had previously learned little of discipline, soon learned to respect and obey him.

Kirtland and Joseph Noyes, a former schoolmate then in charge of a log-school in Youngstown "soon established the rule to visit each other's school on every alternate Saturday and counsel each other on school-teaching. Reading, writing, spelling, arithmetic and geography were the branches required to be taught. I have the vanity to believe that in the three first named, the progress of our classes was as satisfactory as in the classes of the present day. (1874)

Those three branches were rather specialties with both of us. Neither found use for the rod."

Kirtland had lived in Poland about a year when he learned that his grandfather had died suddenly and had bequeathed to him his valuable medical library and certain stipends, with the request that Kirtland should at once study medicine and spend at least one year at the medical school at Edinburgh, in Scotland.

STUDY OF MEDICINE

Returning to Wallingford, Kirtland began the study of medicine under the skillful direction of Dr. John Andrew, a former pupil of his grandfather. Among the diseases common at that time were "sthenic croup" among children and "bilious colic," then an every-day disease. Dr. Andrew's large practice was a great advantage to Kirtland, who accompanied him on his calls.

With Lyman Foot, then an assistant to the well-known chemist, Professor Silliman of Yale, Kirtland set up a laboratory and commenced the study of chemistry. Silliman encouraged the inquisitive youths in every way, and even authorized them to borrow from him whatever equipment and books they needed.

In June 1812, during the early phase of that world war, Kirtland changed preceptors. His new teacher, Dr. Sylvester Wells of Hartford, was one of the first to recognize the necessity of both supporting and counteracting remedies, a doctrine which Kirtland later advanced and then elaborated after some years before the Ohio Medical Convention. An extensive epidemic had developed among the troops, and then spread from Canada southward even to the Gulf of Mexico. During the year with Dr. Wells, Kirtland was able to note the progress of the epidemic.

In 1813 Kirtland was well prepared to enter the medical college at Edinburgh. But the war with Great Britain was still in progress, and transportation across the seas consequently perilous. As a result Kirtland became one of the first matriculants at the new Yale Medical School. Here he received private instruction from Professor Ives in botany and from Professor Silliman in mineralogy and geology.

For his second course of lectures he transferred to the University of Pennsylvania, then the outstanding medical school of the East. At Philadelphia he was aided in his investigation of horticulture by the personal influence of Benjamin S. Barton, eminent professor of botany. Under Barton he wrote a thesis concerning "Our Indigenous Vegetable Materia Medica."

Kirtland returned to the Yale Medical College for the session of 1814-1815. During that year he received the special attention of Dr. Nathan Smith, the famous medical educator. In March 1815, at the age of 21, he passed his examination before the Censors of Yale, and received his medical degree.

In May 1815 Kirtland married Caroline Atwater and settled in Wallingford. In a short time he became the leading physician of that vicinity. His father soon prevailed upon him, however, to return to Ohio and bring his family. Early in 1818 Kirtland sold his residence, and completed arrangements to return to his father at Poland. He later returned to Wallingford for his family, only to discover that the people had appointed him judge of the Probate Court. He accepted that trust, and the following winter resided in Durham, Connecticut, a town with no attending physician. As a result he again developed a large practice although bee culture as well as horticulture again maintained his deepening interest in nature.

In 1820 an "epidemic of fever" broke out in Durham and its vicinity. This spread during the ensuing three years, affecting most of the families in a given neighborhood and then passing on to another locality. Kirtland's rides were extensive, his labors constant. In the fall of 1822 the younger of his two daughters died suddenly, a victim of the prevailing epidemic. In September of 1823 his wife Caroline died from the same disease. Utterly despondent over this double tragedy, Kirtland sadly departed for the West.

He had firmly resolved to follow his aged father in the management of his extensive mercantile business. Nevertheless, as physicians were scarce in the Western Reserve and fevers common, Kirtland was compelled to administer to the sick. In the 1830's he became known as the best and most learned physician in Northern Ohio. Likewise he sustained a favorable reputation as a surgeon, but he soon declined to attend surgical cases, because of the risk practitioners then ran of suits for malpractice. This decision was reached after the famous trial of Dr. Hawley, at which Dr. Kirtland was called in to testify. Dr. Hawley had been charged with malpractice. The defense proved to the satisfaction of the judge and the physicians present that the treatment had been well performed. The jury, however, to the amazement of all attending, brought in a verdict of four thousand dollars damage for the plaintiff.

REPRESENTATIVE TO OHIO LEGISLATURE

In 1828 Kirtland was elected the representative of Trumbull County to the Ohio Legislature. In this capacity he advocated a new penitentiary system, in which convict labor would replace solitary confinment. His bill for the new penitentiary system endangered the flourishing commerce then carried on through the medium of currupt guards, whereby articles manufactured within the penitentiary or stolen were exchanged for tobacco and whiskey. Despite strenuous opposition, Kirtland's bill was passed. Kirtland was thereafter christened "The Father of the New Penitentiary."

During the last of his three successive terms in the legislature, Kirtland championed and secured the charter upon which was built the Ohio and Pennsylvania Canal. He lived to see this put into operation, and following the development of railroads, to pass on into history.

In 1829 Kirtland began collecting and dissecting the land and freshwater molluscs of Ohio. From a study of hundreds of specimens of the genus Unio he concluded that these fresh-water bivalves have distinct sexes. Since conchologists had held that the Unionidae were hermaphroditic, this discovery created much discussion throughout the scientific world.

When the first geological survey of Ohio was organized in 1827, Dr. Kirtland was put in charge of the zoology of the state. The survey was not completed when the state legislature, facing a depleted treasury, withdrew all financial support. Kirtland suspended his own pay and personally recompensed his assistants. In his report of 1838 he wrote:

> "It will afford me the greatest pleasure to communicate much important matter connected with my pursuits to my successor, should the survey be hereafter continued. I am in possession of many interesting facts and specimens which would essentially aid him, all of which will be at his service."

His report includes a list of 585 Ohio vertebrates. It embraces a nearly complete catalog of the fishes, birds, reptiles, insects and molluscs of Ohio, with notes upon the various species.

On Sept. 28, 1837, Dr. Kirtland wrote Dr. Samuel P. Hildreth of Marietta, Ohio:

> "You will probably be somewhat surprised to learn that I have received a notice of an appointment to the Professorship of the Theory and Practice of Medicine in the Ohio Medical College at Cincinnati—and that I have accepted of the trust. . ."

The Ohio Medical College, then the leading medical school in the west, had been buffeted by the stormy waves of dissension ever since its inception. The appointment of Drs. M. B. Wright and J. P. Kirtland brought a new stability to the faculty. On November 8, 1837, shortly after assuming his duties, Kirtland wrote Hildreth:

> ". . . The great revolution and the tumults in the faculty at the late hour of the season will make the class small this winter—between 60 and 70 have matriculated and it is supposed about 10 or 12 more will be added."

But on December 3, 1841, he asserted:

> ". . . Our school is doing well—we have 142 students which makes one of the largest classes that has ever attended this school. The abolition subject gains all the Southern students to either Louisville or Lexington, but I believe it is no very serious loss."

Through the influence of Dr. John Delamater, Kirtland was induced to accept an appointment to the chair of the theory and practice of physical diagnosis in the Willoughby Medical College in 1841. In 1843 a decision was reached to move the college to a larger city. Cleveland was the choice of the majority. Since, however, Dr. Starling, who owned the controlling interest, preferred Columbus, The Starling Medical College of Columbus was founded. Not satisfied with this outcome prominent citizens of Cleveland contributed land and finances for the establishment of a medical school in their city.

On Jan. 9, 1844, Prof. Kirtland wrote Dr. Hildreth:

> "You doubtless have learned that we are busily engaged in building up a Medical Institution at Cleveland. Our efforts are thus successful as we now number 67 students in our class and our course of instruction has been very satisfactory. We hope to have our school . . . as the Medical Department of the W. R. College by an act of the legislature this session. . . ."

In 1846 Kirtland became vice-president of the Ohio State Medical Society then meeting for the first time, and in 1847 he was elected president. In his presidential address concerning the "Influence of the Diathesis or Epidemic Constitution over the Character of Diseases," he proposed that the course of disease is governed in its variability at different periods by fairly uniform and definitive laws.

Hygiene was Kirtland's favorite medical theme. In 1851 he made a report on this subject to the Ohio Medical Convention. At the same meeting he declared that he was convinced that typhoid fever is carried by drinking water. This was many years before the corroborating bacteriology. At the time he presented this paper, he was actively engaged on a committee to provide a purer water supply for Cleveland.

Although an earnest advocate of the right way of living, Kirtland did not undervalue drugs. He medicated rationally and seriously advocated the use of various drugs to his classes as well as in his papers. In a paper of 1851 he even goes so far as to state that:

> "In typhoid coma, the life of the patient must be, in great measure staked upon opium."

He cites his own experience with the use of opium:

> "During the year 1837 particularly, a constant succession of cases of this character occurred in Trumbull County, Ohio, in which my situation enabled me to fully test the powers of my favorite remedy. Its effects were so certain and uniform, that in no instance, did a patient sink under those heavy brain symptoms, as they were then termed, when I had control of the case."

The Cleveland Medical Gazette of 1890 states with respect to Kirtland's medical prowess:

> . . . "It is to be regretted, perhaps, that such powers as his had not centered on medical subjects alone. It is certain that very important results could have been achieved. There is evience everywhere in the lectures which have been

preserved that he was not only thoroughly posted on the theory and practice of medicine, as the science and art stood in his day, but was on many points far in advance of his day and generation. As an instance of the latter fact, we will cite that in the note-book of a student who attended lectures in the winter of 1856-57, we find that Prof. Kirtland thought and taught that **phthisis is contagious.**"

Dr. Kirtland was strongly opposed to homeopathy. He maintained that it acts only through the imagination, diverting the attention of patients and furnishing a cloak for dishonest practitioners.

Quacks evoked his contempt, and he dealt with them sharply.

"Quacks, Empirics, and Irregulars of all denominations," he declared, "are not qualified to practice medicine with safety . . . It is not my desire to wound the feelings, or offend the patrons of any species of quackery, nor even the practicers of the imposition. Many view their course in a more favorable light than I do, but the truth I am bound to tell without regard to persons."

Dr. Kirtland was as much, if not more, concerned with mental hygiene, as with the hygiene of the body. To him it was essential that the mental faculties be kept in the best condition for work. Kirtland himself was an unusually industrious man; he held to the dictum: "Time is money; I have neither of either to spare." And he believed the pursuits of science beneficial to the health of the mind:

"Science keeps the mind active, vigorous and healthy—allowing no time for idleness or vice. Her pursuits soon establish a taste for knowledge which increases with every new attainment."

Kirtland scorned all light reading. Thus he states in an article concerning the eagle in 1850:

"Attempts are too frequently made to divert children by relating to them fiction and false stories. We will now endeavor to interest our young readers by the narration of some particulars respecting the eagle, which are true."

Again in a letter to the Family Visitor, March 14, 1850, he writes:

"At Aurora we found a comfortable public house; but regretted to find the bar-room tables abounding with the light trash that the press is disseminating.

"Two young lads were engaged in reading novels. They were presented with a number of the **Family Visitor,** which we hope may be substituted for Capt. Marryatt."

He thought that "love stories" are debilitating to the mind, and through the mind to the body. Yet the hardy old stoic succumbed, according to his grandson, when once in an unguarded moment his eye lit upon the opening line of the Waverly tales.

In 1850 Kirtland established the Family Visitor, of which he remained one of the three editor-proprietors during its life. His object by this means was

"to furnish the people of Northern Ohio with a kind of reading better than the light and fictitious matter that is now deluging this section of the conntry."

In the Family Visitor Kirtland published his work on the **Fishes of Ohio,** with drawings. His contributions comprised descriptions of his trips and of the cities he visited, notes of history, observations on plants and animals and other miscellaneous subjects. In one article in which he deals with the maternal* instinct among fishes, he points out that if bait is offered to the female* fish guarding her spawn, she soon falls victim to her appetite.

"A scene then follows, that is daily acted in the human circle when a rich man dies. All the small fry in the vicinity rush upon the premises and stealthily pick up every article upon which they can seize. Our readers will pardon the use of the **similie;**—we have had considerable experience in Probate business."

This vein continues in his description of a school of fish inhabiting a fountain in which newcomers were immediately assaulted and killed.

"As soon as the destruction of their adversaries was effected and the spoils of victory disposed of, they, not like a political party that have broken down their opponents, continue to live together in utmost harmony."

In another paper concerning eels, "refrigeration" of sea animals is suggested. Kirtland and two comrades had visited a freezing stream containing frozen eels

"prepared for a fishing exploit—not, however, in accordance with the nice directions of that prince of fishermen, Isaac Walton, but armed with an ax, shovels and baskets."

"We were not the first to visit the ground. The foxes had ranged over them and the remains of many an half-devoured eel showed that Reynard is a skillful disciple of Honest Isaac though perhaps he never read Isaac's interesting book."

The eels were taken home, kept frozen overnight, and then resuscitated by warm well-water on the ensuing morning.

Profound changes were then taking place in the Western Reserve, as industrialism swept aside the forests and depleted the wild life, bringing among the fruits of civilization the opportunity of education. Kirtland writes frequently of these developments. On January 3, 1850, he notes:

"Fifty-three years have nearly elapsed since the first surveys and settlements were made on the Connecticut Western Reserve. Within that period of time a perfect revolution has been effected in its condition. Its forests have been displaced by farms, villages and cities; canals, railroads and other important thoroughfares are extending in every direction; telegraphs are furnishing increased facilities for communication;

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*It is now known that among the fresh water fishes parental care is given by the *males!*

commerce has spread over the Lake and the whole face of Nature has been changed."

In March of that year he forecasts the future of Youngstown steel:

> "As we approached Youngstown, evidences of increased activity among the population apprised us that we were in the coal and iron region. The products of this coal basin will be of more value and importance to the United States than the gold mines of California.
>
> "The soil of the village of Youngstown is sandy and warm. The locality is well adapted for manufacturing establishments which must be erected somewhere in this section of the country."

In 1851 the Ohio Farmer was founded in Cleveland. Kirtland became one of its leading contributors. Since reading was popular in the rural communities scattered far and wide throughout the entire state, the Ohio Farmer had a wide circulation from its inception. Kirtland's influence among the laity thus grew and even assumed wider proportion. The articles contributed to the Ohio Farmer covered various and sundry subjects of a nature and scope similar to those characterizing his literary efforts for the Family Visitor.

In the summer of 1853 Kirtland, together with Prof. S. F. Baird and Dr. P. R. Hoy, made an extended survey of the natural history of Northern Ohio, Michigan, lower Canada, Illinois and Wisconsin. While on these trips he wrote letters to the Ohio Farmer describing the fauna, flora and soil of the country. In 1858 he visited the Southeastern shores of Lake Michigan. He relates how a panther was first observed there:

> "Deer and other wild game are common. Even the dreaded panther is still met with in this vicinity. Evidences of its existing here have lately been furnished. Six weeks since an intelligent young lady, while passing through an extensive forest at dusk, accompanied by a large dog, was suddenly alarmed by a panther's springing from a tree upon the dog, two or three rods in her advance. She of course fled in alarm. The dog, after a short conflict, escaped and both she and the dog arrived safely at home, the latter somewhat scratched and bruised. A man in the vicinity attempted to ridicule this affair, as the work of the young lady's imagination, but only a week or two since he had the **good** or **bad** luck to meet with a similar animal to that which assailed the dog. This man returned home pale and congested with fear, but is free to admit that he **has himself seen the elephant**, and is no longer disposed to ridicule the alarm of the lady."

Ornithology first engaged Kirtland's attention in 1810, and continued throughout his life. In his report prepared for the geological survey of 1837-1838 appeared the first list of birds known to occur in Ohio. This included 222 Ohio birds, of which more than two-thirds were new records.

The eagle appears to have claimed much of his attention, perhaps more than that given to any other bird. In a large oak tree in front of his home an eagle and its mate nested in peace for many years, blissfully unaware of their friendly neighbor so often spying at them through his window pane. Concerning this regal pair, Kirtland states:

> ". . . Though we endeavor to secure most valuable specimens of ornithology that come in our way, in order to donate them to the Academy of Natural Science, for the use of the public, we have in numerous instances refrained from shooting this pair of birds from the veneration we entertain for them."

Kirtland did not, however, entertain any such regard for their hunters, since:

> "A few days since four of those biped nuisances termed Hunter, which are constantly swarming out from this city commenced shooting at these birds but fortunately their attack was unsuccessful. These Hunters are a great pest in this vicinity. Their favorite day for mischief is the Sabbath."

The rarest of the North American warblers bears Kirtland's name. The Kirtland warbler was first shot down in 1851 on the grounds of Kirtland's home by his son-in-law, Charles Pease. It was subsequently described by Prof. S. F. Baird of the Smithsonian Institute. Baird dedicated it to Kirtland,

> ". . . a gentleman to whom, more than anyone living, we are indebted for a knowledge of the Natural History of the Mississippi Valley."

Birds were not the only winged creatures to merit Kirtland's attention and esteem. Throughout his long and useful life, one of his chief interests was in fact the management and observation of the honey bee. The bee was also a subject for many of his papers. In the Cleveland Medical Gazette of 1859-1860 he published "Parthenogenesis in Bees and Moths," in which he asserts that the individuals of a number of species can be produced **sine concubiti.**

Kirtland not only loved the earth's many creatures, but also venerated the changing green world wherein they live. His experiments in horticulture, according to his contemporaries, showed him to be far in advance of the general knowledge. His reputation in this field even became international. His greatest success in fruit-growing was the cultivation of new and superior varieties of cherries. Thus be became known even as the "Cherry King."

He believed proper tilling of the soil to be important in preparing the basis for favorable cultivation:

> "The natural condition of almost every acre of ground is such that by the application of suitable means it can be brought into a tillable state and rendered capable of sustaining a flourishing orchard, so far as growth is concerned."

His success in fruit-growing stimulated others, until many old meadows and pastures about Cleveland were converted into profitable orchards. In an article concerning the "Special Wants of the West" in the Magazine of Horticulture, in 1856, Kirtland attempts to influence the editor to assemble a much needed practical encyclopedia on gardening:

> "It was a leading principle with the father of infinitesimal medicine, that "**what will cause a fever will cure a fever.**" Now, Mr. Editor, as you have had much to do in occasioning this condition of things, we may consistently, with medical transcendentalism, look also to you for the remedy."

Kirtland was a forceful man and possessed deep convictions. In medicine as in politics, he strongly denounced any quackery. In June 1850 while in Columbus for the medical convention, he wrote ironically of the new constitution of the State of Ohio, then being drawn up by the legislature. He was wary of politicians, contemptuous of demagoguery.

> "At Columbus our statesmen and politicians were collected for the purpose of forming a new constitution. From indications we predict that the result of their labors will not be as well adapted to the condition of the present population as has been the instrument that is daily receiving their cuffs and kicks, nor will it be their rule and guide through as long a term of years."

In June of 1848 Kirtland returned to Columbus to attend the Free-Soil Convention. Like his grandfather, Jared Potter of Connecticut, he was an avowed enemy of slavery and a champion of equal rights. On Dec. 3, 1859, the day on which John Brown was executed in Virginia, all Cleveland came out in mourning. From the liberty pole at Kirtland's residence in East Rockport floated an American flag bordered with black, and hung at half-mast. It bore the following inscription:

> "When our citizens are hanged for attempting to carry out the principles of the Declaration of Independence, and the freedom of speech at the Capitol of the Republic is suppressed, it is meet that people should mourn."

During the Civil War Kirtland, then 69 years old, volunteered his services to Governor Todd, in the capacity of examining physician. He later donated his pay for these services to disabled veterans.

In 1869 when 77 years old he sailed to Florida, where he engaged in investigations of natural and local history. On this trip his long-held desire to experience a storm at sea was gratified. A tempestuous gale arose and lasted without intermission for four days, after which he pronounced it "sublime, beautiful and terrific!"

While in the South he examined the graves of confederate soldiers. He could not understand where all the sinners were buried, for from the inscriptions on the stones it was evident that the graves held only the remains of most perfect citizens and patriots.

Interested in the living plants and animals of his time, as well as in development and change, Kirtland was also concerned with the general and local history of humankind. As an active antiquarian he contributed many articles and material objects to the Western Reserve Historical Society, of which he was a life-long member. His correspondence as well as his contributions to periodicals are often enlivened with passages concerning the early settlements and pioneer days.

At home he was known as the "Sage of Rockport," the idol of his community. In 1861 Williams College of Massachusetts conferred upon him the degree of doctor of laws. In 1864 he was elected a member of the American Academy of Sciences; in 1875 at the age of 82, he became a member of the American Philosophical Society, the highest recognition then accorded to a scientist in the new world.

Kirtland died on December 18, 1877, at East Rockport.

And so we leave the great pioneer naturalist of the Western Reserve. He inspires us in that "those who seek shall find." As his patients we, too, would have loved him. Like his storm at sea he was "sublime, beautiful"—and, may even surmise, to the quacks and quackery,—"terrific." We are thankful for our heritage.

We wish to thank the Western Reserve University, The Western Reserve Historical Society, The Ohio State Archeological Museum, The Marietta College Library, Dr. Jonathan Forman, Dr. Robert G. Paterson and others for the loan of manuscripts, letters and other data.

Pioneer Physician Memorialized

The Logan County Medical Society, the Logan County Historical Society and the American Legion participated in the dedication, August 18, near Middleburg, of a New England granite monument honoring the memory of Dr. Phoebe Haines Sharp, who was the first physician to practice in Logan County. Dr. Haines, who came to Logan County with her parents in 1801, was also the founder of the first school and the first church (Friends) in that section of the state. The monument is erected in a field bordering the East Liberty-Middleburg Pike in Zane Township, near Dr. Sharp's place of burial. As part of the dedication ceremonies, Dr. L. E. Traul, representing the Logan County Medical Society, related the growth of the medical profession in the county.

Members of the State Association who have any material dealing with the history of Medicine in Ohio, especially official proceedings of The Ohio State Medical Society prior to 1870, are requested to communicate with Jonathan Forman, chairman of the Committee on Medical History and Archives of the Ohio State Archaeological and Historical Society, 1005 Hartman Theater Building, Columbus, Ohio.

Semi-Antique Notes

JAMES A. McCOLLAM, M.D.

ABOUT a half-century ago, in the Tuscarawas County Medical Society, a debate on germs was settled by Dr. Otis of New Philadelphia telling as positive proof that he had made some beef broth and placed it in a bottle and hung it on a limb of a peach tree in his back yard, and in a few days he could see the germs moving in the broth.

* * *

After a demonstration of the use of the "Murphy button" in intestinal anastomosis before the Tuscarawas County Medical Society in Dennison, the subject—a good-sized dog—was left in Dr. Hughes' stable and when the doctor got his horse in the night to make a call, the dog escaped and for most of two days paraded the streets of Dennison with the bandages on, but when the bandages got loose, the authorities sent the dog to join his fathers and cremated the remains with the precious "Murphy button" in the furnace at the electric light plant.

* * *

Dr. Philips of Dover operated upon a woman in Uhrichsville, opening an abscess in the abdominal wall just to the left of the umbilicus which never healed. Later the case fell into the hands of Dr. Otis of Uhrichsville, and after a time during which the family were told that the operator had cut into the intestines, the patient died. The husband, to gather evidence for a malpractice suit, consulted the writer and requested him to assist in a postmortem, saying there would be no one else present but the attending physician. The writer consented, and had a colleague go with him to a village three miles beyond the home of the deceased and get back just a few minutes late for the postmortem, and of course "stopped with his colleague to make the postmortem," at which it was found that the abscess was due to a ruptured appendix that had burrowed entirely across the abdomen. The malpractice suit never was heard from.

* * *

Consultations are not what they used to be. In my student days I went with my preceptor to be present at a consultation in a case of pneumonia. The consultant was quite a showy doctor and made quite a display of his superiority by explaining to the family how, on certain days would occur the "stage of gray hepitization," then in so many days "red hepitization," and all about the expected "crisis," etc., without waiting to consult the attending physician. When the consultant returned with the attendant the next day and the rusty, "prune juice" expectoration did not materialize, he spent quite some time explaining. Well, it was one of those cases where it never did happen. The promised phenomenon never did come and the doctor was left much discomfited.

The Author

● Dr. McCollam, Uhrichsville, Ohio, is a graduate of Starling Medical College, 1890. He has served as president and secretary of the Tuscarawas County Medical Society several times, and for many years has been one of the leaders in civic affairs in his community.

* * *

The writer rode his horse eight miles and had to make him swim through high water to attend a postmortem examination of a man who escaped and spent all night in his wet clothes after being shot by the night police, and who died in the county infirmary the second day. The coroner decided that the immediate cause of death was "congestion of the lungs." The saloon keepers raised a sum of money, hired a lawyer and had the policeman arrested in the mayor's court of Dennison. At the hearing after the preliminaries, the writer was called and asked about the wound; where the bullet had entered the back, where he had removed it from the anterior abdominal wall, etc. Then after a few questions from the defense attorney, the witness was asked what caused the man's death, and the answer was, "the coroner said that death was due to congestion of the lungs." That ended the suit, but for a long time the writer was accosted on the street occasionally by friends of the dead man with "Doc, don't you shoot me in the back or I might die of "jestion of the lungs."

* * *

In the eighties and nineties, the daily schedule at Starling Medical College was three lectures of 55 minutes, from 9 to 12 A.M. and three lectures from 2:30 to 5:30 P.M. Believe it or not, to sit quiet through these six 55-minute periods each day was monotonous.

Medical students did various things to break the monotony, like throwing paper wads, or if there was anything interesting down in the "Bull Pen" and a student would bend over to get a better view, he might get a wad or some sawdust from the old wooden cuspidors down the back of his neck.

In the Winter of 1889, Drs. Hoover and Frank-

Note—One of a series of Medical Literary essays written at the request of the Editor.

enburg were doing a postmortem examination on a man who had been stabbed in a fight, and a student named Coons was paying such close attention that he attracted a number of paper wads. He finally got mad and picked up one of the cuspidors and threw it at the writer's head. It landed on the guard arm, but the sawdust, tobacco cuids and cigar stumps landed on about 15 or 20 students. Coons was scared and apologized profusely to the operating surgeons, who looked up a minute and then went on with the operation as if nothing had happened.

* * *

In the Fall of 1888 Professor Hoover in his lecture on first aid, advised (as every one did at that time) alcohol in some form be used to prevent and overcome "shock". During the lecture the Professor asked how many could make an eggnog. Several held up their hands but lowered them quickly for fear of being called upon to tell how. The writer held up his hand and Dr. Hoover got off a funny crack about "here is a young fellow just fresh from the hills; let's see how they make an eggnog out in the hills where he came from."

The ingredients suggested were the usual egg and milk with cinnamon and nutmeg, but seasoned with a half pint of whiskey. Some of the students snickered at that and Professor Hoover asked, "How many doses would you make out of that?" The answer was, "Just one; a man is no good in my country if he can't take that at one dose," and the laugh was turned on the Professor who always was a close friend of the writer, and there was no chance lost by either of us to guy the other.

* * *

In 1888, when the writer was a student in the preceptor's office, he asked the old doctor what a nickel-plated tank of about five-gallon capacity was for. The tank had several petcocks and gadgets on it. The old doctor explained that it was the first sure cure he had bought for treatment of tuberculosis. Not long after, Koch had made his wonderful discovery of T.B. baccillus, and the theory was that oxygen would kill the baccillus, and the reason people died was that the oxygen breathed into the lungs could not get to the blood in sufficient quantities. It must be supplemented by more oxygen in the blood and to get the oxygen in the blood this tank was charged and then oxygen (as compressed air) was injected into the rectum and then absorbed into the blood. My preceptor did not cure any person with it.

* * *

An operation for strangulated hernia was performed upon a patient several miles in the country, with almost impassable roads. With no help but Dr. Groves who was assistant, anesthetist, etc., the patient was placed under the influence of chloroform and the hernial sac was opened. The chloroform was gone; when the doctor looked for the ether, it had been forgotten. With Dr. Groves sitting on the man's shoulders, the writer sat astride his legs and finished the operation as best we could while the man squirmed and cursed. This was in 1898, and the fee was $25.00. The victim is still living.

Obstruction in Laryngeal Diphtheria

At times I was driven to do a tracheotomy for obstruction in laryngeal diphtheria, and out of three such operations I had two recoveries. Two of them were done at night, and I did them all alone. The first patient, who came early in my practice, was a young lad with pretty complete obstruction. He was semi-conscious. I had no tracheotomy tube. When I explained to the father that the boy was going to die unless I could relieve him, he said, "Oh, don't let him choke, Doctor!"

Taking a German silver, male catheter from my case (the curved end of which was not unlike a tracheotomy tube), I filled the lower end so that there was an end opening. I cut the catheter in two, split it above the needed length for insertion into the trachea, bent these split parts, laterally and made loops in each end. I started under local anesthesia, but finding that the boy was insensitive to pain boldly cut into the trachea, inserted the tube, and was pleased to notice air, free and unobstructed, enter the lungs by this route. I fastened the tube in place with the aid of an elastic sleeve support, which the father wore, and then considered preparations to be made for the night.

The tube was small and mucus likely would block it, so we went to the chicken house for some long feathers from which we stripped the barbs, leaving a small tuft at the end of each feather. With this I was able to swab out mucus in my small improvised tracheotomy tube. I showed the father how to carry on in this manner, and he practiced until he had the proper technic. Then I also showed him how to replace the tube if it were displaced by coughing. He was to sit beside the boy through the night. A messenger had been directed to go to Shorse's instrument house in Milwaukee (located at what were then Third and Chestnut Streets) and return with a child's size tracheotomy tube by the time I should reach my patient the next morning.

I put in an anxious night over this child, but no news reached me. This I interpreted as good news and it was, for before my arrival the next morning the boy had coughed a large piece of diphtheric membrane from the trachea and was breathing by the natural route. The coughed-up diphtheric cast had been kept for my inspection, the father holding it in his hand until my arrival. —From Reminiscences of the late Robert G. Sayle, M.D., Milwaukee; Wis. Med. Jour., Vol. 40, No. 8, Aug., 1941.

How to Organize a Community Health Education Program

RICHARD A. ASZLING, Columbus, Ohio
Director of Public Education
Ohio State Medical Association

WHAT are you doing about health education in your community? What is being done to show you and your neighbors how to protect the community's health and the health of its individual citizens? What can be done? How do you do it?

One of the things essential to the success of a democracy is good health—community health and individual health. For it is obvious that the seeds of discontent and undemocratic thinking are more easily sown in an unhealthy community than where the standards of health are high.

The current national defense program has placed a stronger emphasis on health than ever before. Physical vigor is needed by any nation which is strengthening its defenses at a rapid pace. Soldiers must be specimens of perfect health, or they cannot meet the strenuous requirements of army life. Workers in defense industry must be healthy to stand up under the strain. And all must have healthy home and family backgrounds if the nation is to prosper and progress.

Some of America's health defects have been highlighted by the physical examinations of draftees. These have shown that many of our youths suffer from preventable physical handicaps. This is a situation which effective community action can help to correct.

How?

By sound and intelligent education programs.

There is much an alert community can do toward the establishment of good health education of the public. Plenty of expert assistance and advice is to be had for the asking. All that is needed is the spirit of determination to do something about it.

How would you like to see one or more of these projects operating in your community:

A regular health department in the newspaper.
A cancer control program.
A free lecture series on health.
A series of trips exploring community health facilities and resources.
A "well baby conference".

These and many other similar projects are possible in any community which has an honest desire to improve its health through education. They require no expenditure of money, but only the support and interest of the community's residents.

1. WHAT IS HEALTH EDUCATION?

Before attempting to organize a community program of health education, it is important to have a clearly defined concept of what health education actually is, what it is supposed to do. Definitions are to be had in quantity. One authority says simply: "Health education, reduced to its simplest terms, means getting people accustomed to good health habits."

The goal of health education is to make modern facts about the maintenance and protection of good health known to the public in such a way that these facts will be effectively used by the individuals who comprise the public. This means that **scientifically accurate facts of good health must be presented in an attractive, understandable, and useful fashion.**

School health education is whatever teaching of health is done in the schools as part of the regular curriculum or through efforts organized and conducted by school personnel. With this type of health education this outline will not be so much concerned, for, since it is an integral part of formal education, it is largely under the guidance of trained educators working in cooperation with the proper health authorities. For this reason, it is hardly likely that any volunteer community group or agency will wish to take an active part in it other than to inform itself of what is done

Editor's Note:

● The accompanying article was prepared by Mr. Aszling at the request of the Ohio Commission for Democracy, a permanent organization created by the Governor for the purpose of fostering the development of democratic community institutions in Ohio, particularly during the current national emergency. One of its aims is to serve as a source of information and assistance for Ohio communities which are attempting to solve their own problems by progressive community action. It suggested that the Ohio State Medical Association prepare an outline for use of community leaders interested in health education projects. This was done by Mr. Aszling after consultation with certain officers and committeemen of the Association and a review of official statements of policy on this general subject. It is being published by *The Journal*, first, because of its news value, and, second, because it contains what *The Journal* believes to be many pertinent suggestions for physicians and medical societies as well as interested laymen.

in its own community and to offer whatever cooperation may be feasible.

Health education for adults is another field of endeavor, by nature quite different from school health education. It offers unlimited possibilities for community projects, but at the same time it challenges ingenuity and sincere effort for several easily understood reasons. In the first place, recipients of this type of health education cannot be gathered together as easily as school children; hence, the material must be extended to them. Furthermore, attendance at class cannot be made compulsory; consequently, whatever educational efforts are made for this purpose must be done so as to stimulate the interest, or to attract (or perhaps entice), the persons for whom they are intended. Obviously, this requires that careful consideration be given to techniques, for in this day of high-pressure public relations, lucrative radio contests, and all sorts of colorful, ingenious advertising, it is sad but true that the American public suffers from dulled intellectual appetites and generally responds only to fanciful appeals. As a result, any educational efforts that are stereotyped, uninteresting, and drab will probably not reach the group for whom they are intended.

As the above discussion indicates, the conscientious community group seriously interested in adult health education will have to survey the various channels or media available through which information can be passed to the public. Among these are, of course, newspaper columns, radio programs, exhibits at county fairs, discussion groups, lecture series, street car cards, noontide club meetings, etc., each of which can be properly utilized to place important facts about health on display.

It is as important to know **what good health education is not** as to know what it is. Hence, before laying plans for specific projects, it is essential to consider the following facts and their implications:

Good health education is not sensationalism. Although as stated above, educational material designed for the adult public must be made attractive and appealing, still good taste and scientific accuracy must be preserved. Much of what is properly included in modern health education—birth control clinics, social hygiene courses, and cancer control programs, to mention a few examples—lends itself to sensational treatment, tabloid journalism, and "scare heads", but this unfortunate situation must be avoided at all costs, else a well-intended program will go astray.

Good health education is not fadism. The well known American tendency to seize on something good and make a fad of it can be an obstacle to sound health education. It is not difficult to recall that there was a time when it became voguish to have the familiar abdominal scar indicating an appendectomy had been performed, or that at another time an unbalanced diet of certain kinds of bread or certain fruit and vegetable juices was an essential thing for any "smart" woman. Then, too, there is the popular fancy for wholesale vitamin fortification which prompts millions of Americans to consume quantities of vitamin pills and capsules with little or no regard for their true requirements or dosage.

It may be too much to hope that such national traits of character as these can ever be eliminated through education, but at least properly planned and executed health education programs can serve to counteract them. Good health is largely a matter of common sense, and it becomes the duty of the health educator to temper the extremes which show lack of common sense with sensible, sane information.

Good health education does not provoke hypochondriacs or neurotics. The only effective way to teach health is to use plain, straightforward language, but care must be exercised to avoid adverse results among that group of persons whom physicians call neurotics. Carelessly prepared material may do more harm than good if it serves to stimulate the imaginations of these unfortunates, who, when provoked by something they read or hear, develop worrisome disease symptoms. A similar group who complicate the health educators' task are the morbidly curious persons who seem to go out of their way to read or hear about physical abnormalities. Thus, while it is highly desirable to be plainspoken in preparing health education material and not to be squeamish or to "beat around the bush", one must bear in mind that the preparation must be made as carefully as possible in order not to incite either of these two types unduly.

2. PROJECTS FOR CONSIDERATION IN HEALTH EDUCATION

The number and variety of health education projects which can be successfully operated in the alert community are limited only by the ingenuity of leaders of the program and their sincerity and willingness to work.

The important factor in setting up a health education project is, of course, cooperation. It would be folly for any committee or planning group to attempt to do something about health in its community without first taking into consideration all the public officials and professional and civic organizations, already in existence, which are concerned with health. Thus, the local public health commissioner and nurses must be included in the plans, the local medical and dental societies must be approached, the health program of the public school system must be considered, and community groups such as the Parent-Teacher organization or the Tuberculosis Society must be asked to cooperate if the project is one in which they are interested.

A few projects in community health education are listed here with brief comments on organization and administration. They may suggest a multiplicity of others which enterprising community leaders can try.

Exploring community health resources. One of the most valuable projects that can be organized for a group of interested citizens is a trip of exploration or fact-finding among the various agencies that promote and protect community health. This may be done by a club group, a class in adult education, or a special group assembled for the purpose. Special precautions must be taken in order not to interfere unduly with the routine or operations of any of the agencies visited. Through cooperative arrangements with the health officer, city and county officials, hospital administrators, and others, the group may tour the health department, examine food and dairy inspection facilities, visit the water works and sewage disposal plant, and attend any one of the many other public health agencies that are essential to keep the modern community free from disease. These visits are best arranged on a weekly schedule as a course or series extending over a period of several weeks.

A regular newspaper health column. For the purpose of bringing information to the attention of the "man in the street," the daily newspaper is still one of the most effective media. Although many newspapers regularly print a syndicated column of health advice by some well known physician, a feature of that type will be more popular if it originates locally. Most editors would be glad to print authoritative health advice furnished by a local health education agency. An excellent example of this may be found in Cincinnati, where a daily column entitled "Save A Life" is printed under joint auspices of the Public Health Federation, the City Health Department, and the Academy of Medicine.

A weekly health radio broadcast. If there is a radio station in the community, a very effective means of health education is a regular broadcast. Radio stations are willing to donate free time to such a project if its quality is up to their regular standards and if it is sponsored by some reliable community group. In Columbus, for example, Station WBNS broadcasts a 15-minute interview entitled "How's the Patient?" each week in cooperation with the Academy of Medicine. Under the leadership of civic organizations interested in health education, such a series of programs might well be started in Ohio's 20 or 25 other communities which have radio stations not now presenting such material.

An adult education course in health education. Healthful living should certainly be one of the subjects taught in community adult education schools. By careful selection of topics in which everyone is interested—i.e., adequate diet, child care, first aid in the home, social hygiene, cancer, appendicitis,. etc.—good attendance can be virtually assured. Speakers for such a course can be obtained through the local medical and dental societies and health officer. Study materials are available from several sources which will be listed in Section 3 of this pamphlet. A course of health lectures such as is suggested here has regularly been presented in Cleveland each year under auspices of the Academy of Medicine.

A maternal health (or prenatal) education course. It is important to the health of any community that expectant mothers be given sound information about caring for themselves and their babies. Courses in prenatal education have been found to answer this need very well, particularly among that group which is likely to receive little prenatal care from a physician. Expectant mothers gathered together for regular instruction can be shown modern methods of caring for themselves during pregnancy and caring for the infant after it arrives, thus overcoming much of the tragedy that comes from ignorance and outmoded practices in childbirth. Teaching of these prenatal groups is done by both physicians and nurses, who may be obtained through their professional organizations and the health officer. An outstanding example of this kind of prenatal education is that done in Cleveland by the Cleveland Child Health Association. Mothers are taught such things as getting the layette ready for the baby's arrival, how to bathe and feed infants, and what kinds of food to eat to insure maximum health for themselves and their babies. The attending physicians in all cases cooperate throughout. While other communities may not be able to operate this project on Cleveland's scale, the fundamental principles employed there would be valid anywhere. Further information may be obtained from Dr. Richard A. Bolt, director, Cleveland Child Health Association, 1001 Huron Rd., Cleveland.

A "well baby conference". The importance of detecting health irregularities early in a child's life is recognized by physicians and health officials today more than ever before. For this reason, a "Well Baby Conference," to which mothers may bring youngsters for a rudimentary physical check-up, may be held with great success. Such a project may be sponsored by any community group in cooperation with the health authorities and local medical and dental societies. It requires, however, very careful attention to detailed planning in advance, and for this reason it is essential to have working committees on arrangements and equipment, publicity, registration, examiners and scoring, and exhibits. A booklet entitled "How to Hold a Baby Health Conference" is available from the Bureau of Health Education of the American Medical Association. (See list of source materials, Section 3). Such a conference is an excellent supplement to the "Summer Round-up" of pre-school children which is now held in many communities under joint auspices of Parent-Teacher Associations, health departments, and medical societies.

Child study groups. A suitable adjunct or follow-up project after a "Well Baby Conference" has been held might be a child study course arranged for interested parents. Like other similar groups, these meet regularly to study the fundamentals of physical and mental hygiene of children. They may be arranged through the cooperation of the health department and the medical society, and pediatricians (child specialists) and specially trained teachers may be obtained to speak at the meetings.

County fair exhibits. Health education exhibits at county fairs and other community expositions are relatively easy to arrange and very effective as educational media. Such exhibits may be sponsored by either the health department or some community group. Suitable materials such as posters, shadow boxes, and three dimensional displays are available from the American Medical Association, American Dental Association, State Department of Health and other similar organizations. Requests to borrow exhibit material should be forwarded through the local health officer or medical or dental society. Exhibits of this type are put on at the present time in a number of rural and semi-urban Ohio counties.

Health motion pictures. Educational "movies" on health topics are among the most popular of the many means of instruction, and, fortunately, there are many which may be easily obtained. Such films may be shown to school groups, clubs, church groups, or at general gatherings open to the whole community. Most of them are interesting productions in story form, teaching the prevention and control of such diseases as tuberculosis, cancer, pneumonia, syphilis, appendicitis, etc. (List of agencies loaning films in Section 3).

Noontide club programs. Any community group organized for the purpose of promoting health education will find the program chairmen of the various noontide clubs and civic organizations very willing to cooperate in placing health education material before their members. This kind of project might well be carried out in connection with some particular event such as National Social Hygiene Day, in February, or National Cancer Control Month, in April. Speakers on health subjects may be obtained through medical societies or health officials, and the programs may be under the sponsorship of the cooperating community health education agency.

Social Hygiene programs. There is virtually unlimited opportunity for educational efforts in the field of social hygiene and sex instruction. Courses of this type sponsored by a responsible community agency or in cooperation with an organization such as the YMCA may be planned for youth groups, prospective draftees, or any other population group for which the subject is pertinent. There is a wealth of printed material published by the United States Public Health Service, the American Social Hygiene Association, etc., which can be used to supplement instruction. Medical societies and health departments usually can provide one or more good speakers who can talk authoritatively on this group of subjects. Under the auspices of the Youth Council of the Dayton YMCA a course of lectures of this type (which was eventually expanded to become "Preparation for Home and Marriage") was offered to the young people of Dayton annually for several years. Physicians and psychologists were the principal speakers. If there is a venereal disease clinic in the community, it is usually a good idea to tie in the lecture course with the clinic.

Cancer control programs. The Women's Field Army of the American Society for the Control of Cancer is organized for the purpose of educating the public to know that "early cancer is curable". Using the slogan, "Fight Cancer with Knowledge," it seeks to spread information on how to reduce the death rate from this disease by means of pamphlets, posters, lectures and motion pictures. It has not as yet been organized in many Ohio counties. Information on how to begin a unit of the Field Army may be obtained from the Ohio Division Headquarters, 2239 East 55th Street, Cleveland.

Nutrition education institute. Recent medical discoveries show direct relationship between disease and inadequate diet, and surveys indicate that many American people are improperly fed. Correcting this is largely a matter of education. County nutrition councils for this purpose have been organized in many Ohio counties. Information about this program may be obtained from Miss Minnie Price, chairman of Ohio Council of Nutrition for Defense, Agricultural Extension Department, Ohio State University, Columbus.

3. SOURCES OF EDUCATIONAL MATERIAL

Bureau of Health Education, American Medical Association, 535 N. Dearborn St., Chicago, Ill. This bureau publishes a wide variety of pamphlets, posters, and health plays on such subjects as child welfare, sex education, personal hygiene, public health, etc., for use in health education of laymen in all age groups. A list of these publications will be sent on request. The Bureau also answers specific questions on health by mail and makes available, through local medical societies, its vast library of radio manuscripts, reprints, and other literature on health.

United States Public Health Service, Washington, D. C. From the office of the Surgeon General of the U. S. Public Health Service may be obtained a number of leaflets on such subjects as appendicitis, cancer, common cold, ringworm, diabetes, etc. Most of these pamphlets are free, but some of the larger booklets, such as the valuable one entitled "Communicable Disease," are sold for printing cost. Another federal agency which publishes helpful health education material is the Department of Labor. Its booklets on such subjects as prenatal and child care, for example, may be used in conducting adult education courses.

Bureau of Public Education, Ohio State Medical Association, 79 E. State St., Columbus, Ohio. This bureau maintains a speaker service for assisting groups of laymen to obtain physicians as speakers on health subjects. It also has an extensive library of health literature which is available to community groups on a loan basis.

American Public Health Association, 1790 Broadway, New York. It has compiled an extensive bibliography of books on health subjects, which may be obtained through its Book Service. It also conducts an annual Institute on Public Health Education, printed reports of which are valuable sources of expert advice and ideas. Another very helpful publication from this association is "Community Organization for Health Education," the report of one of its special committees. Copies may be obtained by forwarding nine cents in stamps to the above address.

American Social Hygiene Association, 1790 Broadway, New York. This is the organization for the fight against syphilis and gonorrhea in the United States. It publishes attractive and interesting pamphlets on these two diseases which are available for educational purposes, and it loans films on the subject.

National Tuberculosis Association, 1790 Broadway, New York. Literature and films on the prevention and cure of tuberculosis are distributed by this organization, which is financed by the Christmas Seal sale. However, it is represented locally in most communities by the county tuberculosis or health association, through whom this material may be obtained. Its state organization is the Ohio Public Health Association, 1575 Neil Ave., Columbus.

Public Relations Bureau, Medical Society of the State of New York, 292 Madison Ave., New York. This bureau has published a number of mimeographed talks on such subjects as child welfare which may be used for groups of laymen. An inquiry may be addressed to Mr. Dwight Anderson, director, to learn what is available.

Metropolitan Life Insurance Co., and other insurance companies. Many very attractive and informative pamphlets and some films on topics such as tuberculosis, diabetes, pneumonia, heart trouble, appendicitis, etc., may be obtained through local agents of the Metropolitan Life Insurance Co. Monthly "Statistical Reports" published by this company also contain interesting articles which may be used in health education.

Women's Field Army, American Society for the Control of Cancer, Ohio Division Headquarters, 2239 East 55th Street, Cleveland. Informative booklets and films on cancer, its control, and prevention, are distributed by this organization.

Ohio Department of Health, State Office Bldg., Columbus. The State Department of Health makes certain exhibit materials and educational pamphlets available when community requests are forwarded through local health commissioners. Inquiries should be addressed to Dr. R. H. Markwith, director.

Obviously this list of suggested sources is by no means complete. To attempt to include all possible sources would extend the list to tedious length, but from those listed above a wealth of helpful material can be obtained. One contact will suggest others, so that the conscientious worker will soon learn for himself where he can get what he wants.

4. FUNDAMENTAL PRINCIPLES TO BE OBSERVED

It is hardly superfluous to emphasize again that in planning health education programs with the help of the various agencies mentioned, the spirit of cooperation is all-important. Leaders should bear in mind at all times that physicians, dentists, nurses, public health officials, and other authorities are glad to assist in any worthwhile community project and should be approached for that purpose. Their professional organizations have for one of their primary purposes the health education of the public, and they are gratified when an opportunity to collaborate on a sound educational project presents itself.

One other point which bears re-emphasis in closing is admirably expressed in a quotation from Dr. W. W. Bauer, director of the Bureau of Health Education of the American Medical Association:

"Thus, our observing citizen looking about him at public health in his community sees much to praise, much to be desired, and occasionally something to condemn. In the last analysis the support of that which is good, the provision of that which is lacking, and the correction of that which is amiss, depends upon the observant citizen. For him and for him alone exist the professions upon which public health is based; namely, medicine, dentistry, nursing, engineering, education, and laboratory work and research."

Open New Offices

Physicians who have recently opened new offices in Ohio include the following: Dr. Harold J. Wilson, Columbus; Dr. C. V. Stark, Lima; Dr. J. M. Brand, East Liverpool; Dr. James F. Morton, Seaman; Dr. W. P. Ellis, Shreve; Dr. Grover S. Brozozowski, Dayton; Dr. Donald D. Shira, LaRue; Dr. E. E. McClelland, Bellaire.

Postgraduate Education Supplement

Review of meetings scheduled for October and November throughout Ohio where members of Ohio State Medical Association can get up-to-date information on medical subjects of current importance

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Places • Dates

Napoleon	October 7
Canton	October 8
Cleveland	October 9
Youngstown	October 30
Toledo	October 31
McConnelsville	November 5
Dennison	November 6
Ashland	November 7
Springfield	November 12
Piketon	November 13

Turn to Following Pages for Details About These Outstanding Sessions

Ohio State Medical Association Regional Postgraduate Lectures

Regional postgraduate meetings will be presented by the Ohio State Medical Association during November at five centers. These have been arranged by the Committee on Education as a part of a Five-Year Postgraduate Program started in the Fall of 1937.

SUBJECTS TO BE PRESENTED

1. Modern Treatment of Burns.
2. Chemotherapy Today.
3. Treatment of Nephritis in Childhood.
4. Control of Obstetrical Hazards.
5. Deficiency Diseases Seen as Complications of Common Medical Conditions.

This year's course will be concentrated in a one-day session, beginning at 1:30 P.M., with three afternoon talks, a dinner session and two evening talks. Names of speakers and additional details will be announced in the November issue of *The Journal.* Members will receive special notices by mail. There will be no registration fee. Nominal charge for dinner.

DATES AND MEETING PLACES

November 5	**McConnelsville**	**High School Gymnasium**
November 6	**Dennison**	**High School**
November 7	**Ashland**	**Ashland Country Club**
November 12	**Springfield**	**Shawnee Hotel**
November 13	**Piketon**	**Opera House (Dinner at Lake White Club)**

Read Your November Issue of The Journal for Additional Information

NAPOLEON—OCTOBER 7

Ninety-Seventh Annual Meeting, Northwestern Ohio Medical Association, Napoleon High School Auditorium

PROGRAM

10:30 A.M. “Diagnosis and Treatment of Peripheral Vascular Disease”, Dr. A. Wilbur Duryee, associate clinical professor of medicine, New York Postgraduate Medical School, Columbia University.

12:00 Noon Luncheon, High School Building. Guest speaker, Dr. Hardy Alfred Kemp, Dean, Ohio State University College of Medicine, “Present Day Trends in Medical Education”.

1:45 P.M. “Diagnosis and Treatment of Acute and Chronic Diarrheas of Infectious Origin, Including Those Related to Parasitic Infections”, Dr. Z. Bercovitz, associate clinical professor of medicine, New York Postgraduate Medical School, Columbia University.

2:45 P.M. “Diagnosis and Treatment of Gall Bladder Disease”, Dr. R. Franklin Carter, associate clinical professor of surgery, New York Postgraduate Medical School, Columbia University.

CANTON—OCTOBER 8

Third Annual Postgraduate Day, Stark County Medical Society, Courtland Hotel, Canton

PROGRAM

Addresses by members of the faculty of Johns Hopkins University School of Medicine, Baltimore, Md.

1:30 P.M. “The Present Status of the Treatment of Malignant Tumors of the Lung”, Dr. Wm. F. Rienhoff, Jr., associate professor of surgery.

2:30 P.M. “The Use of Gold In the Treatment of Chronic Rheumatoid Arthritis”, Dr. Charles W. Wainright, associate professor of medicine.

3:30 P.M. “The Surgical Treatment of Peptic Ulcer”, Dr. Rienhoff.

6:30 P.M. Banquet.

7:30 P.M. “The Place of Psychiatry in the Fraternity of Medicine”, Dr. E. L. Richards, associate professor of psychiatry.

Registration fee, $4.00, including the banquet.

CLEVELAND—OCTOBER 9

Annual Wm. E. Lower Lecture of the Academy of Medicine of Cleveland and Meeting of the Fifth Councilor District of the Ohio State Medical Association, at the Medical Library Auditorium,
Euclid Ave., and Adelbert Rd., Cleveland

PROGRAM

5:00 P.M. "The Clinical Use of the Sulphonamide Drugs", by Dr. Chester S. Keefer, Wade professor of medicine, Boston University School of Medicine, Boston, Mass.
6:00 P.M. "Toxic Manifestations of the Sulphonamide Drugs", Dr. Keefer.
7:00 P.M. Buffet dinner (subscription).
8:30 P.M. "The Newer Physics in Medicine", by Dr. E. O. Lawrence, professor of physics, University of California, Berkeley, Cal.

No registration fee.

* * *

YOUNGSTOWN—OCTOBER 30

Annual Fall Postgraduate Lectures, Mahoning County Medical Society,
Youngstown Club, Youngstown

PROGRAM

4:00 P.M. "Vitamins and Principles of Nutrition", Dr. Tom D. Spies, associate professor of medicine, University of Cincinnati College of Medicine; professor of medical research, University of Texas School of Medicine and University of Alabama School of Medicine; director, Nutrition Clinic, Hillman Hospital, Birmingham, Alabama.
6:30 P.M. Dinner
8:30 P.M. Question and answer period on "Vitamins", conducted by Dr. Spies.

No registration fee. Dinner—$1.50.

* * *

TOLEDO—OCTOBER 31

Medical Institute of the University of Toledo
at the University Auditorium

PROGRAM

Roundtable discussions by following members of the department of physiology, Cornell University Medical College, New York:

Dr. McKeen Cattell, associate professor of pharmacology.
Dr. Eugene F. Dubois, professor of physiology.
Dr. Harry Gold, assistant professor of pharmacology.

10:00 A.M. "Digitalis: New Light on an Old Drug".
3:00 P.M. "The Management of Heart Failure".
6:00 P.M. Dinner at the University.
8:30 P.M. "Circulatory Stimulants and Shock".

No registration fee.

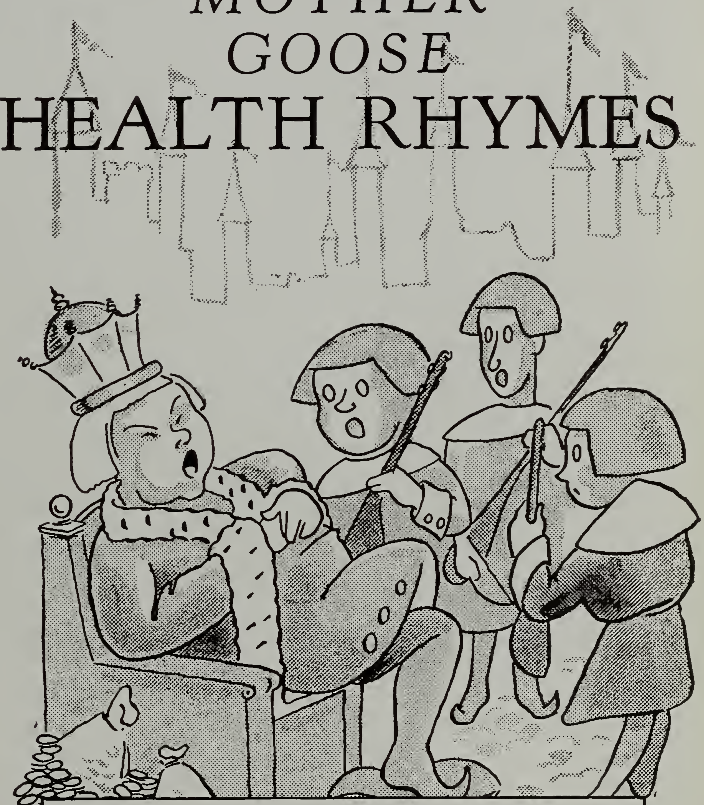
Unique Health Rhyme Exhibit of State Association Makes Big Hit at State Fair; Many Booklets Distributed

THE adaptation of old favorite nursery rhymes to object lessons in health proved to be a very successful technique when employed at the 1941 State Fair by the Ohio State Medical Association. Under direction of the Bureau of Public Education, the Association's booth was so set up as to place fundamental facts about health and medical care before adults by appealing to their children. Chief reason for this novel approach was the fact that at least 80 per cent of the Fair's visitors come in family groups.

Old King Cole was a wealthy old soul;
His gold reached up to the sky.
But in spite of his wealth
He couldn't buy health
Any more than you or I.

NOTE TO PARENTS: Children should learn that good health is something everybody can enjoy regardless of financial status. They should be taught that great riches cannot buy back lost health and that all Americans, rich and poor alike, have an opportunity to stay well by following a few rules of good hygiene. The important thing for the child to know is that his health is given to him to protect by eating the right food, getting proper rest, and taking care of his body.

MOTHER
GOOSE
HEALTH RHYMES



From
YOUR FAMILY PHYSICIAN

Six Mother Goose rhymes were re-written in the Bureau to point out health lessons, and each rhyme was illustrated with a cartoon-like drawing. Large, brilliantly colored panels showing these rhymes and illustrations formed the principal part of the exhibit. They were placed against the background of the booth and lighted by floodlamps to attract attention.

These same rhymes and illustrations were also incorporated into a small booklet which was presented to parents who called at the booth. About 10,000 of the health rhyme booklets were distributed in this fashion. Because they were limited to one or two to a family, and because in many instances they were given to teachers who said they would use them in classroom work, it is estimated that the material eventually reached a total group of interested readers considerably larger than was reached by the health quiz used at the 1940 Fair.

At the bottom of each page in the booklet was a "Note To Parents" which explained in terms on an adult level the health lesson which was incorporated in the rhyme above. An example of one of the rhymes appears with the accompanying cut of the cover page of the booklet.

The back page of the booklet was devoted to a discussion of the importance of teaching children the proper attitudes toward health and their family physician. It said:

> "A DILLER. A DOLLAR
> A TEN O'CLOCK SCHOLAR . . . . ."

For "ten o'clock scholars" and for others who are learning their first important lessons, most of Mother Goose's rhymes teach something that should not be forgotten. These brief verses from our heritage of Anglo-Saxon folklore were originally composed as attractive and delightful means of teaching youngsters the things they should know. If medical science had not been so primitive at the time the Mother Goose rhymes were originated, many more of them would contain valuable health lessons.

The rhymes in this booklet are suggested only as one example of the many ways in which youngsters may be helped to form a proper attitude toward their health and their family physician early in life.

Parents should begin to teach children at an early age that the family physician is a true friend and that he is just as interested in protecting their health while they are well as in curing them when they become ill. Children should be told, too, that in America, because of the system of the private practice of medicine, the opportunity to develop a close personal relationship with the physician and the right to be served by physicians of one's own choice are among the blessings of living in a democracy.

The child who learns these things—even through such simple expedients as these nursery rhymes—will grow into adulthood with a sensible and proper attitude toward his personal health and its protection. And, incidentally, the parent who teaches these lessons will have strengthened and improved his own health knowledge in doing it.

It is planned to make the colored panels available on loan to any agency or individual who may have good use for them. Immediately following the exposition in Columbus, they were on display at the Montgomery County Fair in Dayton. Subsequently several requests to borrow them were received from teachers.

The supply of the health rhyme booklets was almost exhausted at the Fair, and it is not planned to reprint them in the near future. Several hundred are on hand in the Bureau, and these will be distributed in small quantities on request until they are gone. The plates will be kept, however, and if any physician should wish to order quantities of the booklet for distribution among his patients or for other purposes, they may be obtained at the cost of press operation and stock. Inquiries should be addressed to the Bureau of Public Education, Ohio State Medical Association, Columbus.

Health Program of N.Y.A. Curtailed Due To Lack of Funds

Ohio officials of the National Youth Administration have announced a drastic retrenchment in the health program which was started by the N.Y.A. in this state last Spring. (March issue, *The Journal*, page 270, and July issue, page 701.)

The curtailment of the health activities of the N.Y.A. in Ohio was necessitated by a reduction in the amount of money allotted to Ohio for administrative purposes. The funds now available for administrative purposes will not permit the Ohio N.Y.A. to operate all of its work experience projects and leaves no surplus for health activities. A health program is being conducted at each of the five resident centers where youth are housed on a 24-hour basis but for the time being the N.Y.A. will be unable to finance other health activities, including the physical examination programs. However, in some communities the health examinations are being continued by physicians who have been participating, without remuneration.

Prospects for reviving the more extensive health program at some future date are not known at this time, according to Leo B. Jacobs, state N.Y.A. administrator. At the time of the retrenchment, the physical examination program was in operation in 27 counties and tentative arrangements for such a program had been made in 24 other counties. To date, approximately 8,000 youth have been examined in Ohio. Due to the cooperation of physicians in private practice and community health agencies, most of the youth showing defects received prompt treatment, N.Y.A. officials report.

In a letter on this matter to the Executive Secretary of the Ohio State Medical Association, Mr. Jacobs offered the following comment:

"We wish to take this opportunity of thanking you for the splendid cooperation received from your organization and we feel that the success of our health program was due largely to the efforts of the Ohio State Medical Association and the support given to us by the county medical societies."

Names of Ohio Physicians Called To Colors During Past Month

The following Ohio physicians were ordered to active military service during the past month:

Armored Force, Ft. Knox, Ky.: 1st Lt. Harold Raymond Gilbert, Cleveland; 1st Lt. Robert John Munro Horton, Cleveland Heights; 1st Lt. Henry James Wynsen, Youngstown; 1st Lt. Lewis Oliver Frederick, Jr., Osborn.

Corps Area Service Command, (Station Hospital) Ft. Hayes, Ohio: 1st Lt. Herbert Kirchman, Germantown; 1st Lt. Morris Weinblatt, Toledo; 1st Lt. Wolfe Zapolan, Dayton; 1st Lt. Stephen John Stempien, Cleveland Heights.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Following is an open letter to every member of the Ohio State Medical Association:

"What kind of Annual Meeting program would appeal to you?"

What Kind of Annual Meeting Program Do You Want?

The Committee on Scientific Work of the State Association has started preliminary planning for the 1942 Annual Meeting which will be held next April 28, 29 and 30, at Columbus.

It is the desire of that committee to set up the kind of meeting and present the type of program which have the greatest appeal to the greatest number of members of the Association.

However, the committee can only guess at what many members desire unless members will make known their desires. Therefore, it is suggested that each member reflect on past annual meetings which he has attended and criticize each from the standpoint of his personal likes or dislikes.

After doing this, write the State Headquarters Office at Columbus, setting forth the good and bad points of those meetings you have attended, and offer your suggestions for the 1942 session.

What subjects would you like to have discussed? Who are some of the guest speakers you would like to have invited? What innovations in the set-up and program have you to suggest? Are there too many or too few section sessions; general sessions? Should there be a Scientific Exhibit? Do the Round-table Conferences appeal to you? Should there be an Annual Banquet? Should one session be devoted to a discussion of organization, economic, social, legislative and business questions of interest to the profession?

These are some of the questions on which the members of the Committee on Scientific Work are focusing their attention. They would appreciate having your ideas and recommendations.

Let's Iron Out Old Kinks Before Adding New Ones

Those who read the proceedings of the House of Delegates of the American Medical Association published in *The Journal of the A.M.A.* after the Cleveland session last June no doubt were impressed with the wide-spread discussion which was given to the question of establishing procedure for special recognition or designation for physicians engaged in general medical practice. In other words, there was a move toward the creation of a certification board for general practitioners.

Nothing very tangible developed from the discussions at Cleveland. Perhaps it's a good thing. Action now, or even in the near future, would, in our opinion, be premature.

The general practitioner is the foundation stone of medicine. His high place in the practice of medicine must be recognized—we believe it is. As some contend there may be a need for the certification of those engaged in general practice, although one finds many who will debate on the negative side of that issue. However, in our opinion the time is not ripe for such action if for no other reason than because the mechanisms which have been created for the certifications of the specialists are at present far short of perfection. As a matter of fact, the functioning of some of the certification boards is being subjected to severe criticism. Substantial re-adjustments in the workings of those boards is inevitable. Some of them will fail to survive unless they modify their procedures.

The Journal of the A.M.A. in an August 30, 1941, editorial intimated that all is not well on the certification front and hinted at some of the apparent deficiencies. Here is what was said in part:

> "The medical profession itself has assumed responsibility for adequate training of specialists. Moreover, it has recognized the need for establishing mechanisms by which the public may be able to distinguish those who are competent from those who are merely 'self anointed.' Fifteen examining boards are now functioning, representing as many fields of medicine. These boards examine candidates and issue certificates to those who are found qualified in their respective branches. Before examination the boards require a substantial period of preparation.
>
> "Primarily, the process of certification exists in order that physicians, patients, hospitals and others may be able to identify the well trained and fully competent specialist. The conduct of these boards should never be such as to cause them to be regarded as a means of creating, for limited practitioners, a monopoly, or of protecting them from competition. Not only would certification in the specialties lose its significance if the public and the profession came to regard it merely as a measure designed to increase the influence and incomes of a small self-interested group, but the result would be inevitably the elimination of the present voluntary mechanism and the substitution therefor of some process under public control. Some of the examining boards demand that all candidates for examination limit their practice exclusively to the field in which they seek to be certified. Such exclusiveness adds nothing to the candidate's ability, which is the qualification about which the public is concerned; indeed, such limitation may interfere seriously with provisions of competent medical services. A board should never adopt or enforce in practice peculiar requirements related to other qualifications

than the ability and integrity of the physicians who submit voluntarily to examination.

"Power is the most delicate of all the forces that man may employ; its misapplication in what is still an experimental stage in the development and functioning of the certifying boards may turn it upon them to their own harm."

Members of the profession may disagree as to whether there should or should not be a certification board for general practitioners. But, we believe, all must admit that present kinks in the administration of some of the existing certification boards should be ironed out before any new board is established.

It's Time for Each Medical Society To Take an Inventory

Self analysis periodically is good for individuals and institutions. Take for example a medical society. In our opinion it would be wise for each of the county medical societies in the state, as it starts its Fall and Winter activities, to take an inventory. The membership of each should seek the answers to the questions: "What is the society doing for its members?" and "What is the society doing for the community?" By sifting the activities of the society, weaknesses can be ascertained and plans made for expansion where needed.

For too long one of the weaknesses in many medical societies has been a failure to realize that the medical society should and can take a leading role in community affairs. There are innumerable opportunities for the medical society in the average Ohio community—opportunities for giving advice and leadership in matters pertaining to health. By failing to meet this responsibility or by attempting in a half-hearted way to do so, a medical society establishes a barrier between the medical profession and the community which keeps the two from pulling together and lessens public esteem for the profession.

Concerning a medical society's relations, the *Westchester (N.Y.) Medical Bulletin* editorialized recently as follows, hitting the nail on the head in our opinion:

"It has ever been our avowed and consistent theory that the true interests of the medical profession and of the public exactly coincide; and the converse of this proposition has been none the less dominant in our thinking—that the genuine public interest is and must continue to be the primary interest of the medical profession. Endowed with this enlightened philosophy, we have been able to carry on all our activities in full view of the public and we have welcomed, indeed, sought, the assistance of the press and other media of public information in presenting our policies and viewpoints to the public.

"The services which the medical society perform for the community are in essence the public relations policy of the society. These services earn for the society its truest and most important assets—namely, public esteem, public confidence in, and appreciation of, the aims and purposes of the medical organization. In the creation of such assets every physician in his own practice has a vitally necessary part to play. Every time a doctor visits a patient the public esteem of the medical profession is at stake. A thoughtless act on the part of the physician, an act of negligence or of inconsideration, the imposition of a fee that may reasonably be considered unreasonable, a crass word of disparagement passed upon another colleague, or simply a failure to do all for a patient that he feels should have been done for him—these or many other seemingly unimportant acts of commission or omission may hurt the public relations of the medical profession far more seriously than we may realize.

"A true public relations policy, like charity, begins at home."

To repeat, now is the time for each medical society to take stock of itself. There are many new responsibilities confronting the medical profession; many new functions for it to perform. Through its organization, the profession must be alert and equipped to take its place in civic affairs. The first step in preparing for these responsibilities is for each society to determine for itself where it is strong, where it is weak; which activities can be curtailed, which functions should be expanded.

Real Blitzkrieg Against Indifference Badly Needed

A communication received recently at the State Headquarters Office from a member of the State Association carried a subtle warning as well as a challenge to the medical profession of Ohio. We quote:

"There are too many physicians who have become indifferent to the reasons for the enactment of an enabling act at the recent session of the General Assembly and why the medical profession should take the leadership in trying to meet a real health problem through the establishment of voluntary medical service plans. It looks as if these colleagues are permitting themselves to be misled by the arrival of apparent, though temporary, prosperity.

"Not long ago the Bishop of Fargo, the Most Rev. Aloysius J. Muench, observed: 'No matter which side wins the war, we shall face a new social order.' As a principal hope for the salvation of the 'new social order' the Bishop nominated cooperatives—consumers' cooperatives, producers' cooperatives and credit unions.

"When conservative minds such as this turn to a study of the future and come up with such a conclusion, it shows pretty definitely what the trend will be among conservative minds after the war. The more radical minds will demand, of course, a more radical solution but the conservative leaders are going to insist upon cooperatives. Therefore, to my way of thinking, it certainly is up to every physician in Ohio to take a keen interest in the producer type of cooperative (those directed by the group which provides the services) for the distribution of medical services.

"The enabling act which received the active support of the medical profession is the first step in the right direction. Now is the time for definite action toward the second step, namely, establishing medical service plans under the provisions of that act. I for one will be keenly disapponted if my profession muffs this splendid opportunity to exercise the leadership in preparing for future contingencies, many of which will menace the very foundation of the practice of medicine as we know it."

There seems to be little which we can add to this rational summary of the situation confronting the medical profession. Realities are realities. Whether we like it or not, changes will take place during the social readjustment which everyone admits is on the way. In our opinion, the wise thing for the medical profession to do at this time is to take definite steps to prepare for the future; to try to have something definite to offer when the occasion demands. We do not advocate hasty, ill-advised action but careful study, constructive planning to be followed by concerted, direct steps to put life into acceptable plans and proposals.

Local Enterprise and Leadership Should Be Encouraged

The Ohio Commission for Democracy, a group of citizens appointed by the Governor to stimulate democratic community institutions in a time of crisis, is interested in community health education, as outlined in an article published elsewhere in this issue of *The Journal*. That this is a wholesome sign is evident at once to anyone who pauses to consider the implications. In this day of greater and greater expansion of centralized governmental activity and more and more inclination to rely on some superior authority, here is a group dedicated to the proposition that within the community itself may be found the initiative and leadership to meet local—and, indeed, state and national—problems.

If the suggestions contained in the manual on community health education are followed, county medical societies will undoubtedly receive requests for assistance from the leaders of the various health education projects. This is an opportunity for collaboration on a constructive program which should be welcomed everywhere. For, as long as this kind of community enterprise and spirit prevail, there need be no fear of undemocratic ideas in health and medicine, or any other field, gaining a foothold.

Facts, Fancy, Philosophy

It's a lot of fun—enlightening too—to get the viewpoints of those outside the medical profession about questions with a health or medical angle. The newspapers, periodicals, the bulletins of commentators and the like, all offer facts, comments and philosophy which reveal in some instances how the public looks at events and trends which are of more than passing interest to physicians.

For example, out of Washington comes the story that Federal Security Administrator Paul V. McNutt's office of defense health and welfare services "had endorsed and would encourage participation by employers and employes in group payment plans for hospital service". McNutt said, the press service reports, "he would urge upon employers to assume the maximum of responsibility in making hospital service and other community facilities available to their employes, as these plans combine the principles of private initiative and hospital service". Voluntary medical service plans are not mentioned but their inclusion in the endorsement is implied.

The Cincinnati Post notes that 34 new Cincinnati physicians have been licensed by the state medical board, editorializing as follows: "Cincinnatus . . . hopes they won't all aspire to be specialists with nice offices in the Doctors Building and no night calls to make. If Cincinnatus were one of them he would seek an office in some suburban neighborhood or village. There he would also live and become one of the people, their friend and counsellor." You can't laugh off that advice. It makes sense.

In commenting on what it termed "Toledo's need for a modern public health clinic" and the difficulty in getting the public to vote funds for "municipal self-improvement", *The Toledo Times* makes these choice observations: "The time has come for cities to get back on their own. To stop leaning on federal expenditures, to build what they need and charge it directly to the people in the community. This is the common sense way of doing things. It was a mistake ever to get away from it."

Following somewhat the same line of thought, *The Cleveland Plain Dealer* explodes this thought-provoker: "The thought expressed on the floor of the Senate by Senator Harry F. Byrd is widely entertained that while the government calls upon the public to yield everything to the rearmament effort, the government through its multiple agencies goes on as before, spending money freely for non-essential activities and services and setting a particularly bad example both for state and local governments and for individual citizens as well."

On the other side of the fence we find these words of wisdom (depending on how you look at it) in the *Washington News Letter on Social*

Legislation: "Many welfare officials had better watch out or they will find that after years of being 'mean' from necessity they will now find themselves 'mean' from force of habit. The fact is that relief rolls have dropped so rapidly in recent months that many a welfare agency is going to end up the year with a substantial surplus. We are not suggesting that welfare officials should take advantage of this situation to spend welfare funds recklessly or unwisely. But in most welfare programs we have been forced in the past into many a pound foolish economy which should be stopped immediately. It's time now to make some long needed and sound social investments in better medical care, more adequate hospitalization, higher standards of nutrition and more adequate budgetary standards generally." Alas and alack, not a word about easing the situation of the taxpayers who are footing the bills; not a word of doubt as to the need for expansion!

Adding to the confusion, Chairman Altmeyer of the Social Security Board tells Congress the S.S. Act should be liberalized as follows: (1) Federal grants to states for general public assistance; (2) liberalize residence requirements for public assistance; (3) give the poorer states a higher proportion of public assistance funds; (4) extension of social insurance to include groups not covered at this time; (5) provide compensation for the permanently and totally disabled; (6) add health insurance to the social security system.

Almost daily a new paradox is revealed in the news. Better times sweep the country due to defense spending but many men are laid off because of the shortage of materials for nondefense products. This means another group of people won't be able to pay their medical bills. At the same time physicians are busier now than they have been for many moons. Boil down this series of circumstances and you get apathy toward the establishment of voluntary medical service plans through which folks of modest means can prepare for future emergencies. Or, take for example a much talked about current political development in Ohio. Careful management on the part of the present administration has provided the state with a surplus. The administration catches the devil for not kicking back some of the surplus to some of the cities, some of which have deficits due to faulty management. Not a health question to be sure, but the medical profession always has been a supporter of good government and competent public officials, so this situation is of interest to physicians. Medical scientists work their heads off developing the weapons which can be used to help combat nutritional deficiencies. Realizing the public appeal of the vitamin pill, every Tom, Dick and Harry starts to merchandise a vitaminized this or that — even pretzels — almost making a farce out of one of the outstanding contributions of medical science. The Legislature passes a law authorizing the appointment of a commission to study the administrative procedures of state departments, board, bureaus, etc. It finds that the state is in the business of issuing dozens and dozens of licenses; that there is much confusion, great duplication of effort, a lot of lost motion. Yet, at each session of the General Assembly new laws creating new licensing boards and bureaus are enacted. The limited practitioners of medicine never fail to put in their plea for their own board.

Yep, one can get a liberal education by scanning the news and applying its significance to his own business or profession. Try it some time.

Legal Responsibilities Under the Premarital Examination Law

Since Ohio's new premarital examination law became effective (August issue, *The Journal,* page 785, and September issue, page 883) several questions have arisen relative to the legal responsibilities of a physician under this statute, the legal hazards which may confront the examining physician, and problems of professional ethics.

Some of these questions have been studied by officials of the State Medical Association. The unofficial opinions of competent members of the legal profession have been obtained. Based on these discussions an effort will be made to clarify some of the points which have been raised and which apparently have created some confusion.

Point 1. Strictly speaking, so far as the premarital examination law (Senate Bill 141) is concerned, the duly licensed physician is confronted with only two legal responsibilities which are in addition to the legal responsibilities he must meet in everyday private practice. First, if he finds the applicant is not infected with communicable syphilis to state such a fact on an official blank to be filed by the applicant with the Probate Court; second, to make sure that the serological test is made in an approved laboratory and to refrain from misrepresenting any of the facts prescribed by the act—in other words, intentionally making a false statement on the blank. There is nothing in the act which requires the physician to report anything to the Probate Court or to the applicant except a professional opinion that the applicant is not infected with communicable syphilis.

Point 2. Section 11187 of the General Code which is part of the premarital examination law has been on the statute books for many years, but has been slightly amended to bring it into conformity with Senate Bill 141. Section 11187 states that no license shall be granted when either of the parties applying for a marriage license is an habitual drunkard, epileptic, imbecile, or insane person, or when either of such parties is under the influence of an intoxicating liquor, or narcotic drug, or is infected with syphilis in a form that is communicable or likely to become communicable. With the exception of determination as to whether or not the applicant is infected with syphilis, the legal responsibility for determining whether the applicant has any of the other conditions or ailments enumerated rests on the Probate Court. This responsibility has rested on the Probate Court for years and is not modified by the provisions of the premarital examination law.

Point 3. The premarital examination law does not change the legal responsibility of the physician to report communicable and infectious diseases to public health authorities as required by law or regulations. In other words if the physician finds while examining an applicant for a marriage license that the applicant has a reportable communicable or infectious disease the physician is required to make a report to the proper authorities, a procedure which he is required to follow in everyday practice.

Point 4. This question arises: When the physician discovers that the applicant is suffering from a communicable or infectious disease, what is the physician's duty and obligation with respect to the other party to the contemplated marriage and other individuals subject to exposure? There are two phases which must be considered:

(a) In such instances, the physician should report such facts to the health authorities as required by law so that proper steps toward quarantine and isolation can be taken.

(b) The physician under ordinary circumstances should warn the other party to the contemplated marriage and others who would be in jeopardy unless warned, although it is quite likely that prompt action by the health authorities would meet this contingency. The weight of court opinions on this question amply protects the physician, holding that the physician is obligated to protect society and that the law of privileged communications should not be applied to such instances. The Medical Practice Act of Ohio specifies that a physician shall not be held to answer for betrayal of a professional secret and shall not be liable in damages for truthfully informing one of the parties to a contemplated marriage that the other party has a venereal disease, or for imparting such information to the parent, brother or guardian of the party not so infected. From the standpoint of professional ethics, the Principles of Medical Ethics hold that it is not a violation of professional ethics for a physician to warn persons in danger of being exposed that a person whom he has examined is infected with a communicable disease.

Point 5. When a physician during an examination of an applicant for a marriage license discovers that the applicant has a physical ailment, physicial deficiency, or physical abnormality, other than a communicable disease, what, if any, obligation or legal responsibility rests on the physician?

This is a confusing and debatable question. The courts have disagreed; legal opinions differ. The law of privileged communications with all its ramifications is involved. If a physician believes that a couple could not enter into a happy marriage relationship because of the physical disability of one of the parties, is it his duty to warn the other party? Is it his duty to impart such information to the Probate Court? Is this a matter of public concern and public welfare? Is it a medical or a social problem? Shall professional relationship or common humanity be the determining factor.

In discussing questions of this kind, one authority on medical jurisprudence comments as follows: "What should the doctor do? If he gives the warning, he may get no thanks, he is certain to incur the serious displeasure of his patient, and he may find himself faced with legal proceedings. On the other hand his conscience may worry him if he stands by and allows an innocent person or persons to run a serious risk which might be prevented by a word of warning. Moreover, in some cases, if he remains silent he may run the risk of incurring public or private odium and censure." As an anti-climax to this observation, however, the same authority states: "No practical rule can be laid down. It all depends on the individual and the particular case."

Point 5 involves a real problem for the physician. There is a noticeable lack of definite advice on which he may reply. Assuredly, the physician must exercise tact and diplomacy in dealing with cases of this kind. He should hope that such cases will be few and far between. Undoubtedly, they will be.

So far as other phases of the premarital examination law are concerned, the provisions of that act are definite and there should be little confusion in the mind of the physician as to his legal responsibilities.

Changes in State Hospital Staffs

State Hospital staff changes recently announced by Welfare Director Charles L. Sherwood include the resignation of Dr. R. E. Bushong as state commissioner of mental diseases and his appointment as superintendent of the Lima State Hospital for the Criminal Insane; the appointment of Dr. H. P. Lee, assistant physician at the Toledo State Hospital for 12 years, as superintendent of the Cleveland State Hospital, a post vacated by Dr. Bushong when he became state commissioner of mental diseases, July 1, 1940.

Farm Security Medical-Health Program Now in Operation in 44 Ohio Counties; Experience in 13 Areas Analyzed

According to data released on August 30, 1941, by the Ohio Headquarters of the Farm Security Administration, the health-medical program of the FSA was in operation in 44 Ohio counties on that date with approximately 3,000 farm families participating and between 600 and 700 physicians rendering services.

The so-called pooled plan is in operation in each county, the funds being contributed by FSA clients participating in the medical-health program from money borrowed from the Federal Government under the farm rehabilitation program. The average annual amount paid by each FSA participating family is approximately $22.00.

The table on the next page shows some interesting statistics on the experiences of the medical-health program in 13 areas, in all of which the program has been in operation for a period of from 10 to 12 months. Comparable figures for other areas are not available at this time because the program has only recently been started in many of them. At a later date, similar statistics will be published covering other sections of the state.

In several instances data was not submitted to the state office of the FSA by the local administrator. Nevertheless, the following totals for the 13 areas listed in the table present a fairly complete review of the experiences of the FSA plan in those communities:

Under the heading "Family Information", the figures reveal that there were 2,133 FSA familiies in the 13 areas, 1,076 of whom were participating in the medical-health program at the end of the accounting period (10, 11 or 12 months). Persons eligible to receive services at the end of the accounting period totaled 5,304.

Services are rendered under two classifications, "Physicians Services" (non-surgical) and "Surgical". Under the heading of "Physicians' Services" the following data is shown: Physicians performing services, 191 (incomplete); families receiving services, 644; persons receiving services, 1,675; office calls, 6,583; hospital calls, 125; home calls, 883; obstetrical cases, 27 (incomplete).

Totals for the "Surgical Services" are as follows: Surgeons performing services, 134; families receiving services, 172; number of persons receiving services, 199; office calls, 389; hospital calls, 127; home calls, 68.

Inasmuch as separate funds are maintained for "Physicians' Services" and the "Surgical", the financial experience of the 13 areas is divided into two classifications.

Figures on finances with respect to "Physicians' Services" (non-surgical) are as follows: Total available for payment of bills, $11,942.48; total of approved fee bills, $15,243.65; total paid for services, $11,794.57; percentage paid on bills, 77%.

The following totals are for payments, etc., under the "Surgical Services" classification: Total available for payment of bills, $4,509.45; total of approved fee bills, $6,533.75; total paid for services, $3,836.68; percentage paid on bills, 58%.

Grand totals for the two classifications are: Total available for payment of bills, $16,451.93; total of approved fee bills, $21,777.40; total paid for services, $15,631.25.

The 44 Ohio counties in which the FSA medical-health plan is now in operation are: Adams, Ashland, Brown, Butler, Carroll, Champaign, Clark, Clinton, Columbiana, Coshocton, Defiance, Delaware, Fairfield, Fayette, Gallia, Geauga, Greene, Guernsey, Hardin, Henry, Highland, Hocking, Holmes, Jackson, Lawrence, Logan, Madison, Medina, Meigs, Monroe, Montgomery, Morgan, Muskingum, Perry, Pike, Putnam, Richland, Sandusky, Seneca, Tuscarawas, Union, Vinton, Warren, Wayne.

Name Changed; It's "Petrogalar" Now Instead of "Petrolagar"

A change in the spelling of the name "Petrolagar" to "Petrogalar" has been announced by the Petrolagar Laboratories. The change is being made in both the product name and corporate name.

Company officials, while pointing out that the adoption of the new spelling does not affect the formula or quality of the product in any way, said that they considered the change advisable to avoid any possible misconception as to the nature of the product.

"Because it has never been the intention of the company to imply that agar-agar was used for any other purpose than as an emulsifying agent, the last syllable of the former name has been altered in favor of the new spelling", officials said.

Officials emphasized that no change has been made in the size of the package, price, or formulae and that each of the five different types of the product will carry the new spelling "Petrogalar". The new corporate name is: Petrogalar Laboratories, Inc., and the address remains, 8134 McCormick Boulevard, Chicago, Illinois.

Tuberculosis Conference Scheduled

Physicians and others interested in tuberculosis from throughout 14 midwestern states will gather for the conference of the Mississippi Valley Tuberculosis Association in Columbus, at the Deshler-Wallick Hotel, Oct. 1 through 4. All Ohio physicians are invited.

DATA ON FARM SECURITY MEDICAL-HEALTH PROGRAM IN 13 OHIO AREAS

NAME OF AREA	Perry	Warren	Adams	Holmes	Hardin	Clark	Champaign	Logan	Morgan	Pike	Tuscarawas	Jackson & Vinton	Lawrence
Family Information													
FSA fam. in co.	152	237	189	95	194	106	152	249	77	218	137	202	125
Fam. at end of yr.	67	109	74	65	113	45	78	143	49	86	95	87	65
Persons end of yr.	331	506	375	338	498	210	367	614	244	450	511	498	362
Mos. operation	12	12	12	11	10	10	11	11	10½	12	10	12	11
Physicians Service													
Doctors perf. ser.	19	26	15		25	20	20	28		9		18	11
Families served	54	90	65		83	66	63	69		57		62	35
Persons served	124	279	183		237	91	148	172		172		188	81
Office calls	447	840	767	328	830	204	386	662	296	501	608	458	256
Hospital calls		1	5	10	23	23	5	39			11		8
Home calls	36	117	94	69	25	24	109	127	56	56	87	54	29
Obstetrical cases		9	2	1						5		6	4
Surgeons Service													
Doctors perf. ser.	6	19	14	9	18	7	13	21	10	4	7	2	4
Families served	5	21	26	13	20	6	23	18	8	9	8	2	13
Persons served	7	24	40	15	21	7	23	21	8	9	8	2	14
Office calls	7	48	64	10	8	10	64	104	3	24		2	45
Hospital calls	2	10	3	16	2	17	5	69	2	1			
Home calls	3	1	7	9	6	9	6	25		2			
Pooling Information													
Physicians services													
Available for paym. bills	773.81	1074.04	1140.38	692.39	1271.63	483.40	921.80	1656.48	533.13	853.94	1052.82	892.00	596.66
Total amt. approv. bills	696.75	1582.00	1721.00	819.45	1784.65	506.00	1437.35	2111.00	743.20	957.00	1224.75	1088.00	572.50
Percent pd. on bills	100%	67%	66%	83%	71%	95%	64%	78%	73%	89%	85%	81%	100%
Total amt. pd. for serv.	696.50	1063.67	1137.03	687.50	1266.28	482.04	921.98	1649.56	532.78	852.23	1052.12	880.38	572.50
Surgeon Services													
Available for payment of bills	286.09	396.59	456.15	257.04	467.80	178.10	339.73	673.12	198.24	316.12	390.34	330.00	220.13
Total amt. approv. bills	204.00	593.00	441.25	392.00	1216.50	441.50	449.00	1521.50	570.00	209.00	400.00	35.00	61.00
Percent pd. on bills	100%	66%	100%	65%	38%	40%	75%	44%	34%	100%	97%	100%	100%
Total amt. pd. for ser.	204.00	393.66	441.25	255.15	426.27	176.93	338.88	673.01	197.05	209.00	389.48	35.00	61.00

Many Improvements in Medical Education Cited in Annual Report of A.M.A. Council; Data on Ohio Schools Listed

MEDICAL education activities in relationship to national defense are among the highlights of the Forty-First Annual Presentation of Educational Data by the Council on Medical Education and Hospitals of the American Medical Association, published in the August 30, 1941, issue of *The Journal of the A.M.A.*, pages 681-788.

A summary, statistical and editorial, of the educational activities of the Council is presented annually in the Educational Number of *The Journal.* Therein are contained a review of preliminary and undergraduate education, a description of the approved medical schools of the United States and Canada, revised lists of hospitals approved for the training of interns and for residencies and fellowships in the specialties and an audit of what is being done, and by whom, throughout the various states to extend opportunities for the advanced education and continued training of practicing physicians.

DEFENSE PROGRAM OFFERS PROBLEM

Regarding defense activities, the report says: "Leaders in education acknowledge the paramount importance of national defense. National defense, however, includes not only military preparedness but also the preservation and development of all institutions necessary for the safety and welfare of the people. An effective program of national defense, therefore, demands that educational institutions which provide a continuous supply of men skilled in professions, notably in medicine, be maintained unimpaired. To this end the Council on Medical Education and Hospitals has been frequently in conference with the medical services of the army and navy. Through its Committee on Medical Preparedness, the American Medical Association has rendered and continues to render every possible assistance.

"The faculties of medical schools have been classified with respect to availability for medical service in national defense. An alphabetical list of essential faculty members was supplied the Surgeon General of the United States and the commanding officer of each corps area in the fall of 1940 and was subsequently revised as occasion required."

The report points out that formal action by the Council on the question of increasing the enrolment of medical students or accelerating the output of graduates of medical schools has not been taken because of the absence of any definite information from the War Department as to the necessity for such moves. However, 44 medical schools have increased the enrolment of the 1941 entering class by a total of 329 students. Eleven schools have made it possible for students to anticipate, during the current summer, a part of the required work of the fourth year and in three of these schools the program is required. Classes will be graduated in February or March by eight schools. Three schools will allow seniors to finish their work two months earlier and begin their internship or other work at that time, but they will graduate with the regular class in June.

"The medical curriculum has not thus far been curtailed," the report says, "although the total time involved has been shortened by cutting down vacations. Additional courses in military medicine are being offered. The medical schools, apparently, are able to proceed without extensive revision of the curriculum and without shortening the period of residence. An accelerated program is not possible in many institutions for various reasons, including the fact that their teaching forces have been reduced for military reasons. Others would consider such a program if completion of the course could be integrated with hospital internships. The financial aspect is an important consideration both for students and for schools. . . .

MUST MAINTAIN SUPPLY

"It would appear that every effort is being made by medical educators to cooperate in the national emergency while at the same time endeavoring to insure that the education of physicians is continued at the present level and without interruption. It should not be necessary to argue that a continuing and undiminished supply of well trained physicians is absolutely essential to the welfare of the nation. We cannot speed up that training beyond a certain point without lowering educational standards and degrading the quality of medical service. The present crisis demands, in fact, better qualified physicians if we are to face the future with reasonable confidence. Those who represent the medical schools are making every effort to preserve their institutions and to maintain, unimpaired, their priceless contribution to the health and welfare of the nation."

Discussing the constantly improving medical education facilities in this country, the report says: "One of the striking chapters in the history of education deals with the part played by the American Medical Association, through its Council on Medical Education and Hospitals, in raising the standards of medical education in the United States. Instead of the poorest medical schools in the world, we now have the best. If the public had had to wait until a popular majority interested itself in providing good medical schools, we should have few of these schools today. It was the understanding of the physician together with his willingness to take responsibility and to contribute of his time and means that has made possible the unparalleled transformation of the last 30 years in the field of medical education. There has been a steady improvement in medical schools, in hospitals and above all, in the competence of the young physicians who are entering practice."

IMPROVEMENTS IN 1940

Improvements in medical schools in the United States during the academic year 1940-1941 revealed in the report, include the following: Ten schools increased their annual budgets in amounts ranging up to 33 per cent; students were selected more carefully, entrance requirements were raised and higher scholastic standards adopted; additional instructors were obtained for both laboratory and clinical divisions; new laboratory buildings were opened or extensive building programs got under way in four schools; new hospital buildings were erected, wings added or buildings remodeled, an increased number of beds were allotted to teaching and better control of hospital facilities and better working arrangements were reported by eight schools; the curriculum of junior and senior years was extended through summer months to take full advantage of available clinical material in four schools; the libraries of three schools have been improved by the addition of new buildings, purchase of additional books and periodicals or a grant. Two schools reported that teaching facilities in the field of phychiatry have been strengthened and two reported an orientation of laboratory work with the main branches of clinical work.

Discussing the outlook in regard to administration, the report says that "Medical schools now face an entirely new set of conditions. In the existing emergency, various pressure groups threaten to destroy or seriously impair the achievements of the last generation. At the same time, in the defense program, 617 instructors, chiefly Medical Reserve Officers, have gone to the colors. Their duties have been assumed, in many cases, by men of less experience. In many instances hospitals and medical schools have been cooperating actively with local, appeal, medical advisory and induction boards of the Selective Service by making available their facilities, resources and personnel. Many schools have organized hospital units. In the midst of all these activities every effort must be made to maintain our present standards in the training of physicians so that the health of our people shall not suffer."

For the academic year 1941-1942, 69 of the 77 medical schools in the United States have adopted preliminary entrance requirements in excess of the minimum two years established by the Council in 1918. Five require a degree, 58 require three years of college study, as recommended by the Council since 1939, one requires four years and five will admit students with three years of college if a bachelor's degree is conferred in absentia at the end of the first year in medicine. Only eight schools have a stated two year requirement. It is pointed out by the report that the general trend toward three or more years of college work would appear to be due to a desire for a more thorough grounding in all the branches of chemistry and greater familiarity with nonscience subjects, such as languages, literature, history or economics. During 1940-1941 only 1.4 per cent of the entire freshman class was admitted with less than three years of college work.

Fifty-two medical schools in the United States offer a four year course; seven have a continuous schedule, four of which also require a hospital internship; seven require four years of systematic instruction followed by a fifth year spent as an intern or in research work.

"Because of the existing national emergency," the report says, "special sessions for senior medical students have been arranged in eleven schools to make possible completion of the course at an earlier date."

Two schools discontinued the internship requirement affecting the class of 1941. The University of Cincinnati College of Medicine has made the discontinuation permanent and the University of Illinois College of Medicine waived it for those completing the senior year in 1941 because of the national amergency.

In 1941 a total of 21,379 students were enrolled in 77 medical schools.

Since July 1, 1940, the degree of Doctor of Medicine has been granted to 5,837 students; 5,275 received the degree from medical schools in the United States and 562 from Canadian faculties of medicine.

The lowest enrolment among schools offering the complete medical course was 115 at the Woman's Medical College of Pennsylvania and the highest among schools in the United States was 616 at the University of Illinois College of Medicine. The lowest number of students graduated was 22 at the Howard University College of Medicine and the greatest number, 302, in the United States was at the University of Illinois College of Medicine. This latter figure, however, represents a double graduating class, since, because of the existing emergency, the internship was waived for the senior class of 1940-1941, representing 138 students.

ADDITIONAL INTERESTING FIGURES

The state of New York continued to furnish the greatest number of students according to state of birth, its total being 2,686, followed by

Pennsylvania with 1,880, Illinois with 1,309 and Ohio with 1,085. An interesting aspect of the report is the fact that 13,659 students are studying in the state of their birth and 10,502 elsewhere.

New York, with the largest number of schools, nine, had the greatest number of students, 2,646, and 617 graduates. Pennsylvania with six schools had 2,379 students and 565 graduates. Illinois with five schools and 1,912 students had 679 graduates.

"The medical licensing boards of twenty-one states, the District of Columbia, Alaska, Hawaii and Puerto Rico," the report says, "require that all applicants for licensure serve a hospital internship. . . . Some states require the internship of graduates of medical faculties abroad and of applicants for reciprocity or endorsement."

The number of women medical students for 1940-1941 shows a slight increase over the previous year. In 1939-1940 there were 1,291 female medical students and 273 graduates, and in 1940-1941 these totals had increased to 1,308 students and 310 graduates. Of the total student enrolment in medical schools, 5.4 per cent were women. Statistics compiled from the American Medical Directory revealed that in 1940 there were 7,470 women physicians listed in the United States. Women are admitted to all medical schools in the United States except Georgetown University School of Medicine, Emory University School of Medicine, Harvard Medical School, St. Louis University School of Medicine, Dartmouth Medical School and Jefferson Medical College.

The total number of undergraduate medical students for the past year was 108 more than that of the previous year and the number of graduates increased 178 over 1940. The discontinuance of the internship requirement by two schools is responsible for the increase in the number of graduates.

The number of medical schools in 1905 was 160; by 1910 the number dropped to 131 and since 1915 there have been fewer than 100. Since 1933 there have been 66 approved four year schools in the United States, one offering only clinical courses, and 10 schools of the basic medical sciences.

The Council's report includes a detailed list of the 735 hospitals in the United States approved for the training of interns. These instutitions have a capacity of 249,045 beds, and 6,874 internships. In addition the report lists 616 hospitals with approved residencies and fellowships. The residencies total 4,683 and the fellowships, 550.

DATA ON OHIO HOSPITALS

Ohio hospitals approved for intern training number 42. They are: City, Peoples and St. Thomas Hospitals, Akron; Aultman and Mercy Hospitals, Canton; Bethesda, Christ, Cincinnati General, Deaconess, Good Samaritan, Jewish and St. Mary Hospitals, Cincinnati; City, Fairview Park, Lutheran, Mt. Sinai, St. Alexis, St. John's, St. Luke's St. Vincent's Charity, Woman's, and University Hospitals, Cleveland; Mt. Carmel, St. Francis, Starling Loving University and White Cross Hospitals, Columbus; Huron Road Hospital, East Cleveland; Good Samaritan, Miami Valley and St. Elizabeth's Hospitals, Dayton; Mercy Hospital, Hamilton; Memorial and St. Rita's Hospitals, Lima; City Hospital, Springfield; Flower, Lucas County, Mercy, St. Vincent's, Toledo, and Woman's and Children's Hospitals, Toledo; Youngstown and St. Elizabeth's Hospitals, Youngstown.

Ohio hospitals approved for residencies in specialties are: **Communicable Diseases**, City Hospital, Cleveland. **Dermatology and Syphilology**, Cincinnati General Hospital; City Hospital and University Hospitals, Cleveland. **Gynecology**, University Hospitals, Cleveland; and Starling Loving University Hospital, Columbus. **Medicine**, City Hospital, Akron; Mercy Hospital, Canton; Cincinnati General Hospital, Deaconess Hospital, Good Samaritan Hospital, Jewish Hospital and Christ Hospital, Cincinnati; City Hospital, Cleveland Clinic Foundation Hospital, Mount Sinai Hospital, St. Alexis Hospital, St. John's Hospital, St. Luke's Hospital, St. Vincent Charity Hospital and University Hospitals, Cleveland; St. Francis Hospital and Starling Loving University Hospital, Columbus; St. Elizabeth's Hospital, Youngstown Hospital, Youngstown; Miami Valley Hospital, Dayton; Huron Road Hospital, East Cleveland; Lucas County General Hospital, and St. Vincent's Hospital, Toledo. **Psychiatry**, Cincinnati General Hospital, and Longview State Hospital, Cincinnati; City Hospital, Cleveland; Toledo State Hospital, Toledo; Harding Sanitarium, Worthington; Columbus State Hospital, Columbus. **Obstetrics**, Cincinnati General Hospital; City Hospital, Mount Sinai Hospital, St. Ann's Maternity Hospital, St. John's Hospital, and University Hospitals, Cleveland; St. Vincent's Hospital, Toledo, and Miami Valley Hospital, Dayton. **Obstetrics-Gynecology**, Huron Road Hospital, East Cleveland; Mercy Hospital, Canton; Lucas County General Hospital, Toledo; St. Luke's Hospital, Cleveland. **Ophthalmology**, Cincinnati General Hospital; City Hospital and University Hospitals, Cleveland. **Ophthalmology-Otolaryngology**, Starling Loving Hospital, Columbus. **Orthopedic Surgery**, Cincinnati General Hospital; Mount Sinai Hospital, Cleveland Clinic Foundation Hospital, and University Hospitals, Cleveland. **Otolaryngology**, Cincinnati General Hospital; City Hospital, St. Luke's Hospital, University Hospitals, and Cleveland Clinic Foundation Hospital, Cleveland. **Pathology**, Cincinnati General Hospital: City Hospital, Mount Sinai Hospital, St. Luke's Hospital, St. Vincent Charity Hospital, and University Hospitals, Cleveland; Starling Loving

University Hospital, and White Cross Hospital, Columbus; Miami Valley Hospital, Dayton; Youngstown Hospital, Youngstown. **Pediatrics**, Children's Hospital, Akron; Children's Hospital, and Cincinnati General Hospital, Cincinnati; University Hospitals, Cleveland; Children's Hospital, Columbus. **Radiology**, City Hospital, Akron; Cincinnati General Hospital, and Jewish Hospital, Cincinnati; City Hospital, St. Luke's Hospital, St. Vincent's Charity, University Hospitals, and Cleveland Clinic Foundation Hospital, Cleveland. **Surgery**, City Hospital, and St. Thomas Hospital, Akron; Mercy Hospital, Canton; Christ Hospital, Cincinnati General Hospital, Deaconess Hospital, Good Samaritan Hospital, Jewish Hospital, Cincinnati; City Hospital, Mount Sinai Hospital, St. Alexis Hospital, St. John's Hospital, St. Luke's Hospital, St. Vincent Charity Hospital, University Hospitals, Cleveland Clinic Foundation Hospital, Cleveland; Huron Road Hospital, East Cleveland; Starling Loving University Hospital, Columbus; Miami Valley Hospital, Dayton; St. Elizabeth's Hospital, Youngstown; Lucas County General Hospital, Toledo. **Tuberculosis**, Hamilton County Tuberculosis Sanatorium, Cincinnati; City Hospital, Cleveland; Sunny Acres, Cleveland Tuberculosis Sanatorium, Warrensville; Franklin County Tuberculosis Sanatorium, Columbus. **Urology**, City Hospital, University Hospitals, and Cleveland Clinic Foundation Hospital, Cleveland; Starling Loving University Hospital, Columbus. **Thoracic Surgery**, City Hospital, Cleveland. **Anesthesiology**, Huron Road Hospital, East Cleveland; **Mixed**, Glenville Hospital, Cleveland; Mansfield General Hospital, Mansfield; Grant Hospital, Columbus. **Neurosurgery**, Cleveland Clinic Foundation Hospital. **Neurology**, Cincinnati General Hospital, Cincinnati.

EXAMINING BOARDS IN SPECIALTIES

Name of Board	Year of Incorporation	Certificates Awarded* Total Issued to March 1. 1940	July 1, 1941
Am. Board of Pediatrics	1933	1,470	1,716
Am. Board of Psychiatry and Neurology	1934	832	1,140
Am. Board of Orthopaedic Surgery	1934	652	704
Am. Board of Dermatology and Syphilology	1932	492	553
Am. Board of Radiology	1934	1,404	1,603
Am. Board of Urology	1935	677	784
Am. Board of Obstetrics and Gynecology	1930	1,051	1,469
Am. Board of Internal Medicine	1936	2,158	2,679**
Am. Board of Pathology	1936	706	825
Am. Board of Ophthalmology	1917	1,706	1,875
Am. Board of Otolaryngology	1924	2,977	3,265
Am. Board of Surgery	1937	1,274	1,703
Am. Board of Anesthesiology	1938	86	132
Am. Board of Plastic Surgery	1937	109	109
Am. Board of Neurological Surgery	1940	---	88
Totals		15,594	18,645

* Active diplomates.

** Certification in the subspecialties: Allergy 59; cardiovascular disease 56; gastroenterology 11; tuberculosis 9; total, 135.

The Council reproduced in its report information about the approved examining boards in medical specialties, including the history of the organization of each, present officers, qualifications, purposes, fees, examination requirements and other pertinent data. Since the House of Delegates of the American Medical Association in 1933 authorized the Council to formulate standards and officially approve such certifying boards in the specialties, 15 boards have been established, and as of July 1, 1941, there were 18,645 physicians certified. Data on the approved boards appears in the accompanying tabulation. The number certified by some of the boards have been reduced by death. Recorded therefore are the active diplomates.

State Issues Licenses To 21 Nervous and Mental Disease Institutions

On September 4, the effective date of Senate Bill 173 passed at the recent regular session of the Ohio General Assembly, the Division of Mental Diseases of the State Department of Welfare announced a list of 21 private and municipal institutions in Ohio licensed for the treatment of nervous and mental diseases in accordance with the provisions of that act. Each of these institutions has met the requirements prescribed by the Department of Welfare and the State Division of Industrial Relations, and, in addition, were approved by fire department officials in their respective localities.

Included among the major requirements which such institutions must pass before obtaining state approval are: (1) A duly qualified physician, who has had at least three years' practical experience in the treatment of persons mentally ill, must be on its staff. (2) A registered nurse with special training in the field of mental diseases must be in charge of the nursing staff. (3) They must have proper equipment for the diagnosis and treatment of mental disorders in accordance with present standards. (4) Adequate records must be kept of all patients admitted. Those licensed under the act must have their licenses renewed annually if they wish to continue in the treatment of the mentally ill.

Institutions which have received state approval include: Sawyer Sanitarium, Marion; Cincinnati Sanitarium, Cincinnati; Fair Oaks Villa Sanitarium, Cuyahoga Falls; Windsor Hospital, Chagrin Falls; Good Samaritan Hospital, Cincinnati; Post Shaker Sanitarium, Cleveland; Just-a-Mere Hospital, Akron; Mercy Hospital, Canton; Ridgecliff Sanitarium, Wickliffe; Wickhaven, Wickliffe; Harding Sanitarium, Worthington; City Hospital, Cleveland; Cincinnati General Hospital, Cincinnati; Dellhurst, Mentor; McMillen Sanitarium, Columbus; Cedarcrest Sanitarium, Bay Village; Ingleside Home, Cleveland; Ann Patterson, Inc., Euclid; Maple Ridge Hall, Euclid; Ingleside, Chardon; Orchard Springs Sanitarium. Dayton.

In Memoriam

Augustus Harper Buckmaster, M.D., Bexley, Long Island College of Medicine, Brooklyn, 1883; aged 82; died August 31. A native of New York, Dr. Buckmaster practiced there for many years. He was on the staff of Woman's Hospital. Before locating in Columbus 25 years ago, Dr. Buckmaster had been a professor at the University of Virginia for 12 years. A son and a daughter survive.

William H. Eastman, M.D., Fredericktown, Starling Medical College, Columbus, 1892; aged 78; member of the Ohio State Medical Association and the American Medical Association; died September 2. Dr. Eastman practiced in Fredericktown for nearly 50 years. He was one of the organizers and a former president of the Knox County Medical Society. Dr. Eastman was a member of the Presbyterian Church and various Masonic Orders. Surviving are his widow. a daughter, a son—Dr. Robert L. Eastman, Mt. Vernon, three sisters and three brothers.

William Leonard Evans, M.D., Hanover; Starling Medical College, Columbus, 1903; aged 61; member of the Ohio State Medical Association and the American Medical Association; died September 10. Dr. Evans practiced in Mt. Sterling for one year and in Hanover for 37 years. He was a member of the staff of Newark City Hospital, and for 19 years he was a member of the Licking County Board of Education—twice serving as its president. In 1938 he was vice-president of the Licking County Medical Society. Dr. Evans was a member of Phi Beta Pi, Methodist Church and the Grange. His widow, a son and a daughter survive.

Frank Wesley Gavin, M.D., Canton; Bellevue Hospital Medical College, New York, 1894; aged 69; died August 12. Dr. Gavin practiced in Ft. Wayne, Indiana, for four years and in Canton for 43 years. He was a former president of the staff of Aultman Hospital, and from 1911 to 1915 he was coroner of Stark County. Dr. Gavin was a member of the Methodist Church, the Masonic Order and Woodmen of the World. His widow and four daughters survive.

Henry George Gibson, M.D., Glouster; Starling Medical College, Columbus, 1898; aged 74; died September 1. A native of Iowa, Dr. Gibson had practiced in Glouster and the Sunday Creek valley for 43 years. Surviving are his widow and two daughters.

Eugene S. Hannum, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1892; aged 82; died September 1. Dr. Hannum retired several years ago because of ill health, after having practiced in Mantua and Cleveland for many years. His widow, a daughter and a sister survive.

William Webster Harmer, M.D., Greeley, Colorado; Ohio Medical University, Columbus, 1900; aged 70; member of the Colorado State Medical Association and the American Medical Association; died August 21. Dr. Harmer moved to Colorado 35 years ago, after having practiced for several years in McConnelsville. He was a former Grand Master of the I.O.O.F. in Colorado. Surviving are his widow, three sons, a brother, Dr. Charles L. Harmer, Danville, and a sister.

Elmer Ellsworth Kimmell, M.D., Columbus; Hahnemann Medical College and Hospital, 1905; aged 67; member of the Ohio State Medical Association and the American Medical Association; died August 21. A member of the Medical Staff of the State Industrial Commission for the past six years, Dr. Kimmel formerly practiced in Miamisburg and Dayton, and for six years was coroner of Montgomery County. Dr. Kimmel served with the 161st Indiana Division in the Spanish-American War, and was a lieutenant in the Medical Corps of the U.S. Army in World War I. He was a member of the Spanish-American War Veterans, the American Legion, the Veterans of Foreign Wars, Alpha Sigma and the Masonic Order. His widow, a daughter, three sons, three sisters and a brother survive.

Harry Bertolette Kurtz, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1893; aged 71; former member of the Ohio State Medical Association and the American Medical Association; died August 21. A native of Columbiana County, Dr. Kurtz first practiced in Leetonia, moving to Cleveland in 1900. He was a former member of the staff at St. Luke's Hospital. Dr. Kurtz was known in sport circles as the co-inventor, with the late Dr. Robert Newcomb, of the game of archery golf, which they developed at the Mayfield Country Club. He was a member of various Masonic Orders. Two sons survive.

John Finley Miller, M.D., Akron; Starling Medical College, Columbus, 1895; aged 75; member of the Ohio State Medical Association and the American Medical Association; died August 19. Dr. Miller, a native of Meigs County, practiced at Langsville for several years, and located in Akron in 1913. He was a member of the Masonic Order. Surviving are his widow and two sisters.

Mary Enastasia Minor, M.D., Toledo; Pulte Medical College, Cincinnati, 1899; aged 77; died August 6. Dr. Minor formerly practiced in Cincinnati. Two daughters survive.

Charles Marion Neldon, M.D., Coshocton; Eclectic Medical College, Cincinnati, 1901; aged 67; former member of the Ohio State Medical Association and the American Medical Association; died August 23. Dr. Neldon retired recently because of ill health, after having practiced in Coshocton for 40 years. He was a member of the Baptist Church, Masonic Order and the Rotary Club. His widow, a daughter, two brothers and two sisters survive.

John Warren Norman, M.D., St. Paris; University of Cincinnati College of Medicine, 1917; aged 51; former member of the Ohio State Medical Association and the American Medical Association; died September 1. Impaired health caused Dr. Norman's retirement from the practice of medicine a few years ago, and since then he has devoted his time to his real estate and community interests. A veteran of World War I, Dr. Norman was a member of the American Legion and the Lions Club. His widow and his mother survive.

Charles Florent Puterbaugh, M.D., Tipp City; Medical College of Ohio, Cincinnati, Ohio, 1909; aged 70; member of the Ohio State Medical Association and the American Medical Association; died August 16. Dr. Puterbaugh had practiced in Tipp City for 11 years, and was formerly located in Painter Creek, Darke County, for 20 years. He was a member of the Church of the Brethren. Surviving are his widow; a daughter, three sons, one of whom is Dr. E. G. Puterbaugh, Tipp City; two sisters and a brother.

William Rosenberg, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1919; aged 47; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; diplomate of the American Board of Urology; member of the American Urological Association. Dr. Rosenberg practiced in Cleveland for 22 years. A past-president of the Cleveland Urological Society, he was chief of the department of urology at Mt. Sinai Hospital. Dr. Rosenberg was a member of the Temple on the Heights, the Masonic and Pythian Orders. Surviving are his mother, four sisters and a brother, Dr. David V. Rosenberg, Cleveland.

Shober Smith, M.D., Barnesville; University of Pennsylvania School of Medicine, Philadelphia, 1910; aged 56; died August 14. Dr. Smith practiced in Akron for one year and in New York for several years. He had been retired for a number of years. His mother and a sister survive.

Louise Southgate, M.D., Covington, Kentucky; Woman's Medical College, Cincinnati, 1893; aged 84; former member of the Ohio State Medical Association and the American Medical Association; died August 15. Dr. Southgate retired 10 years ago. She formerly practiced in Cincinnati. A sister and a brother survive.

John Lawrence Travis, M.D., Germantown; Miami Medical College, Cincinnati, 1890; aged 75; died August 15. Dr. Travis retired in 1939, after having practiced in Germantown for nearly 50 years. During World War I he was a captain in the Medical Corps of the U.S. Army. He was a member of the American Legion and the Masonic Order. His widow and a sister survive.

Elmer Charles Wurst, M.D., Defiance; St. Louis University School of Medicine, 1932; aged 33; member of the Ohio State Medical Association and Fellow of the American Medical Association; died September 3. Dr. Wurst had retired from active practice early this year because of ill health. A native of Ottoville, he had practiced in Defiance for over seven years. Dr. Wurst was a member of the Catholic Church and the Knights of Columbus. Surviving are his widow, two daughters, a son, his parents, a sister and two brothers.

Coming Meetings

Ohio State Medical Association, Columbus, April 28-30, 1942.

American Medical Association, Atlantic City, June 8-12, 1942.

American Academy of Ophthalmology and Otolaryngology, Chicago, Oct. 19-23.

American Academy of Pediatrics, Boston, Oct. 8-11.

American Clinical and Climatological Association, Skytop, Pa., Oct. 16-18.

American College of Physicians, St. Paul, April 20-24, 1942.

American College of Surgeons, Boston, Nov. 3-7.

American Public Health Association, Atlantic City, Oct. 14-17.

Associated Anesthetists of the United States and Canada, Boston, Nov. 3-7.

Association of Military Surgeons of the United States, Louisville, Ky., Oct. 29-Nov. 1.

Association of American Medical Colleges, Richmond, Va., Oct. 27-29.

Clinical Orthopaedic Society, Cleveland and Akron, Oct. 3-4.

Interstate Postgraduate Medical Assembly, Minneapolis, October 13-18.

National Society for the Prevention of Blindness, New York City, Dec. 4-6.

Southern Medical Association, St. Louis, November 10-13.

Society of American Bacteriologists, Baltimore, Dec. 29-31.

Fourth Annual Forum on Allergy, Detroit, Jan. 10-11, 1942.

Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

Dr. R. L. Lawwill, health commissioner of Adams County, was host to the Adams County Medical Society at a dinner meeting at West Union, Wednesday, September 10. It was a very fine meeting, with only two members of the society absent. A number of guests were present from adjoining counties.—O. T. Sproull, M.D., secretary.

BUTLER

Dr. Richard B. Cattell, Boston, Mass., spoke on "The Diagnosis and Management of Large Bowel Lesions, Inflammatory and Neoplastic", at a dinner meeting of the Butler County Medical Society, Thursday, September 25, at the Hotel Manchester, Middletown.—Mabel E. Gardner, M.D., secretary.

HAMILTON

The first regular meeting of the 1941-1942 year of The Academy of Medicine of Cincinnati was held at Cincinnati, Tuesday evening, September 30. Speakers included Dr. Charles E. Kiely, the retiring president, and Dr. John H. Skavlem, the incoming president. Various standing committees presented their annual reports.—Bulletin.

HIGHLAND

Dr. R. E. Howard, Cincinnati, was guest speaker at a meeting of the Highland County Medical Society, Wednesday noon, September 3, at the Hotel Parker, Hillsboro.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

Dr. John A. Caldwell, professor of clinical surgery, University of Cincinnati College of Medicine, and a past-president of the Ohio State Medical Association, spoke on "Fractures of the Long Bones", with an added discussion of "Compound Fractures", at a meeting of the Darke County Medical Society, Tuesday evening, September 9, at Wayne Hospital, Greenville.—W. D. Bishop, M.D., secretary.

GREENE

An excellent discussion of "Diabetes for the General Practitioner", was presented by Dr. Thos. P. Sharkey, Dayton, at a meeting of the Greene County Medical Society, Thursday, September 4, at Xenia.

The society adopted a resolution deploring the markedly increased death toll from traffic accidents in Greene County, and voted to do everything possible to decrease this death toll.—Donald F. Kyle, M.D., secretary.

MIAMI

Probate Judge Carl B. Felger discussed "The Premarital Examination Law", at a meeting of the Miami County Medical Society, Friday afternoon, September 5, at the Piqua Memorial Hospital. A technicolor motion picture on "Regional Anesthesia", was shown through the courtesy of the Winthrop Chemical Company.—News clipping.

Third District

(COUNCILOR: GUY E. NOBLE, ST. MARYS)

SENECA

A meeting of the Seneca County Medical Society, Tuesday evening, August 19, at the Shawhan Hotel, Tiffin, was devoted to a discussion of the provisions of the premarital examination law.—N. E. Williard, M.D., secretary.

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

"The Diagnosis and Treatment of the Anemias", was the subject discussed by Dr. Claude E. Forkner, assistant professor of clinical medicine, Cornell University Medical College, New York, at a meeting of The Academy of Medicine of Cleveland, Friday evening, September 19, at the Medical Library Auditorium, Cleveland.—Bulletin.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

MAHONING

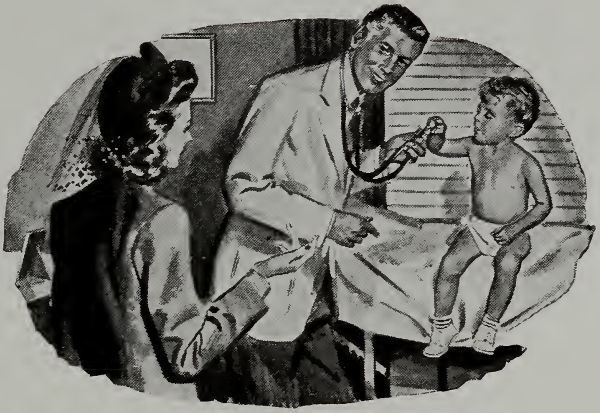
Dr. S. Milton Goldhamer, assistant professor of internal medicine, University of Michigan Medical School, Ann Arbor, spoke on "Diagnosis and Treatment of the Anemias", at a meeting of the Mahoning County Medical Society, Tuesday evening, September 16, at the Youngstown Club, Youngstown.—Bulletin.

STARK

"Proctology as Related to General Practice", was the topic discussed by Dr. Charles E. Howard, associate professor of proctology, University of Cincinnati College of Medicine, at a meeting of the Stark County Medical Society, Wednesday, September 10, at the Massillon Country Club.—Clair B. King, M.D., secretary.

SUMMIT

Dr. John A. Toomey, professor of clinical pediatrics and contagious diseases, Western Reserve University School of Medicine, Cleveland, spoke on "Anterior Poliomyelitis", at a meeting of the Summit County Medical Society, Tuesday eve-



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ning, September 9, at the Mayflower Hotel, Akron. —Bulletin.

Seventh District

(COUNCILOR: CARL GOEHRING, M.D., STEUBENVILLE)

TUSCARAWAS

The annual picnic of the Tuscarawas County Medical Society and the Woman's Auxiliary was held at Winklepeck's Grove, Dover, Wednesday, August 20. Features included golf, bridge and a quiz contest. Arrangements were in charge of a committee consisting of Dr. Burrell Russell and Mrs. Margaret Coleman, Dover; Dr. C. M. Dougherty, New Philadelphia, and Dr. R. E. Wolf, Uhrichsville.—News clipping.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

GUERNSEY

Drs. George F. and Reo M. Swan presented the scientific program at a luncheon meeting of the Guernsey County Medical Society, Friday, August 8, at the Berwick Hotel, Cambridge. Procedures to be followed by physicians in order to obtain remuneration for services to relief clients were explained by Miss Agnes Fleming and Mr. Hugh McTeague, state relief examiners.—News clipping.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FAYETTE

Dr. James H. Warren, Columbus, gave a very interesting and instructive address on "Undulant Fever", at a meeting of the Fayette County Medical Society, Thursday, September 4, at Washington C.H.—James F. Wilson, M.D., secretary.

FRANKLIN

"Acute Anterior Poliomyelitis: Its Recognition and Management", was the subject discussed by Dr. John A. Toomey, professor of clinical pediatrics and communicable diseases, Western Reserve University School of Medicine, Cleveland, at a meeting of the Columbus Academy of Medicine, Monday evening, September 22.—Bulletin.

PICKAWAY

The first regular Fall meeting of the Pickaway County Medical Society was held at Circleville, Friday, September 5. Dr. Ned B. Griner was elected to membership and appointed secretary-treasurer to fill the unexpired term of Dr. B. N. Coers, now on active duty in the U.S. Army. —Ned B. Griner, M.D., secretary.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

LORAIN

Dr. Frederick Rittinger, Cleveland, spoke on "Chemotherapy in Streptococcus and Pneumococcus Infection in Childhood", Tuesday, September 9, at a dinner meeting of the Lorain County Medical Society, at the Spring Valley Country Club, Elyria.—L. H. Trufant, M.D., secretary.

RICHLAND

A business meeting of the Richland County Medical Society was held at the Mansfield General Hospital, Thursday afternoon, September 18. —Geo. L. Evans, M.D., secretary.

Conference on Industrial Health To Be Held in Chicago, Nov. 5-6

Under the auspices of the American Association of Industrial Physicians and Surgeons, the American Conference on Industrial Health will hold its Second Annual Meeting on November 5 and 6, 1941, at Chicago Towers, Chicago.

The opening session will be a symposium on the technical problems of industrial health on the basis that health supervision in industry involves two great principles: (1) the adjustment of the working environment to the employee; and (2) the adjustment of the employee to the working environment, including also the human environment.

The afternoon session will be a symposium on the economics of industrial health, including: (1) organization and cost of a health service, and (2) discussion on the value of industrial health service to the employer, the employee and the public.

The morning of the second day will be given over to a symposium on the social implications of industrial health, discussing how far an industrial health service should go; are hospital and medical care plans related to industrial health service in any practical way; does legislation play a part in this problem; and the evaluation of labor turnover, spoilage, and lack of trained men, together with the experiences of management and the interests of insurance carriers in the medical and social problems presented.

The sessions will close with a schedule of plant medical department inspections, by special arrangements with local industries.

October 19-26 National Hearing Week

The American Society for the Hard of Hearing has designated the week of October 19-26 as National Hearing Week, using the rallying call—"Defend Hearing". The society, with almost 200 chapters, including several in Ohio, while working continuously to alleviate the problems of the hard of hearing, will concentrate its efforts during that week to make America hearing conscious. Physicians, parents and teachers are earnestly requested by the Society to aid in its program.

Upper Arlington—Dr. Ben C. Houghton has been appointed local health commissioner.

You name it, Doctor

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But Health Insurance Is Different

By NATHAN SINAI, Ann Arbor, Michigan

Editor's Note: Through the courtesy of Harper and Brothers, The Journal is privileged to reproduce the accompanying article which appeared in the August, 1941, issue of Harper's Magazine. In it Mr. Sinai discusses many interesting phases of voluntary health insurance, stressing the good and bad features of present-day insurance programs. The medical profession may not agree with all of his deductions and observations but it will have to admit that he has offered plenty of food for thought about a topic of unusual current interest and importance. Sinai is professor of hygiene and public health at the University of Michigan. It will be remembered he was a member of the research staff of the Committee on the Costs of Medical Care and co-author of a best-seller in the field of medical economics—"The Way of Health Insurance"—published in 1932. His latest contribution, the accompanying article, deserves careful reading on the part of all physicians.

* * *

THE battle for health insurance is over. There may be some straggling rear-guard action, but to anyone acquainted with the warring factions of 1935 the extent to which it is accepted in 1941 is unbelievable. The early propagandists and missionaries who regarded health insurance as a social and economic panacea and promised too much now admit that it has many complexities; those representing the professions, who looked upon it as a social and economic morass and predicted nothing but disaster, now agree that it has many possibilities. Both groups concede that the problems cannot be solved nor can the qualities be evaluated unless health insurance is offered to the public and its results are studied critically. So, while the battle is over, the less exciting but essential job of making it work has just begun.

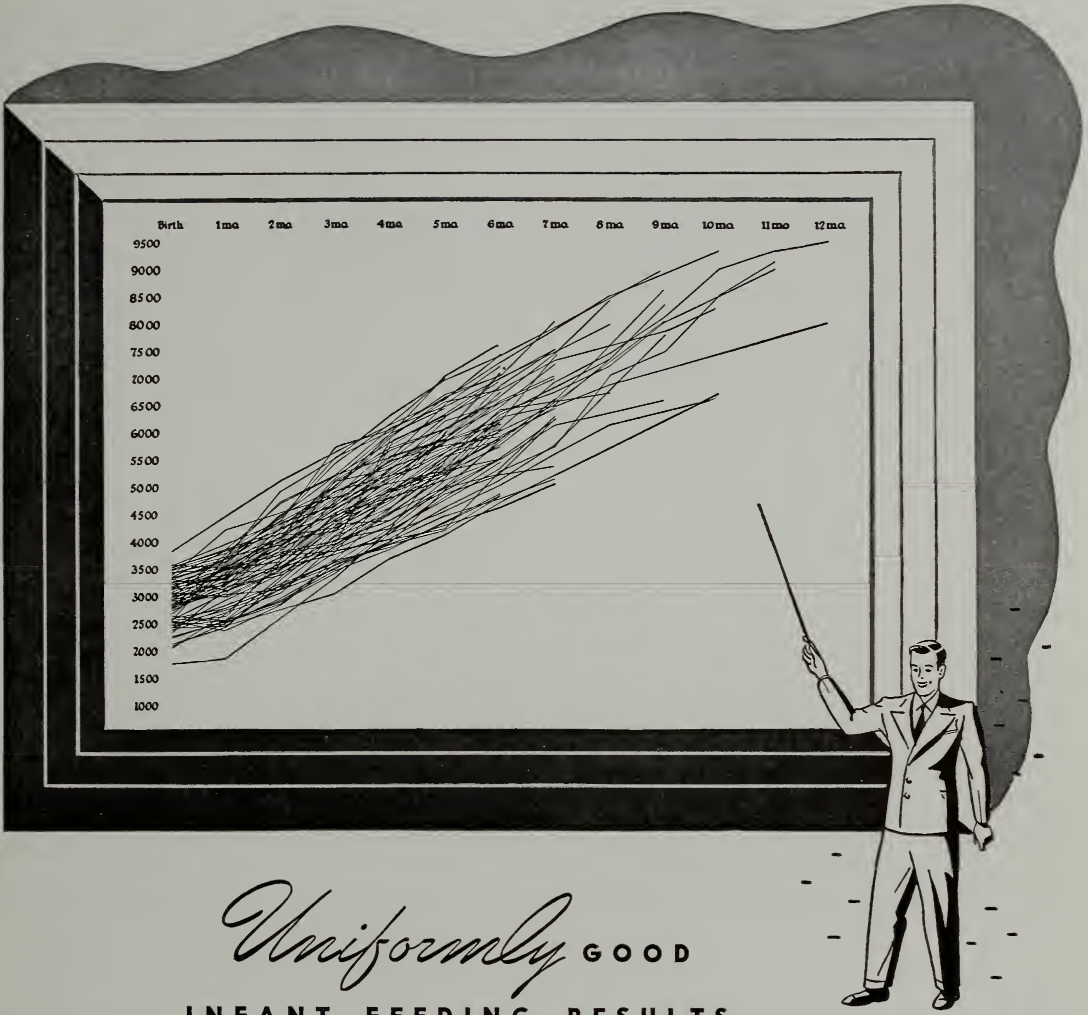
PUBLIC ENTHUSED

Today the public may purchase one or more of a bewildering variety of health-insurance offerings. The agencies that are selling health insurance comprise almost every type, from the "non-profit" corporations of medical societies and hospital associations to the high-pressure commercial insurance companies. And the public is purchasing with enthusiasm. There are no accurate figures on the number of subscribers in commercial companies, but the non-profit organizations report that over six million people subscribe to insurance covering all or a part of a possible hospital bill. To show the speed with which the idea is taking hold, almost a third of the six million became subscribers in 1940. In commercial-insurance circles health insurance is described as "the hottest line being offered."

Insurance against a hospital bill is the most simple type. It usually calls for either twenty-one or thirty days of care in a semi-private room or a ward, the use of the operating room, certain routine laboratory tests, ordinary drugs and dressings, and a limited use of x-ray facilities. As a rule, hospital insurance is sold to groups of employees to whom the insurance is explained individually or, more often, at a general meeting. The insurance begins when a sufficient percentage of employees sign the application cards that authorize their employer to pay for the insurance from their wages or salaries. In some cases the employer contributes a part of the costs.

Aside from hospital insurance there are other contracts that cover or appear to cover almost every kind of medical care that may be needed. The impression is being created that health insurance is exactly like other types of insurance rather than what it still is—a process of trial and error. While there is little doubt that health insurance will survive and grow, the sooner its present limitations are recognized the less painful will be the trials, the errors, and, possibly, the failures. Since it is the public that is paying the bill the public should know what the limitations are and what can be done at this time on a reasonably sound basis. The job of making health insurance work has just begun.

The principle of health insurance is simple. Some thousands of persons become members of a group to share the costs of medical care. A number will have major illnesses, others minor illnesses, and some will go through a year to boast that they "never see a doctor". All contribute annually a specific amount of money to a common fund, and whatever happens—an illness requiring hospitalization and surgery or a minor condition treated in a physician's office—it is the fund that pays, not the individual. Basically the principle is the same as that of fire insurance, where property owners contribute to a central fund and share great or small losses caused by fire. Both forms of insurance originate in the fact that a certain contingency may be expected to occur—sickness among a group of people, or fire among a group of houses; but while it is possible to predict its occurrence for the group as a whole, no one can say which person or which house will be affected. When a house is destroyed



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by fire the impact of the loss, instead of concentrating solely upon the owner, is diffused among the thousands of property owners who are joined in a system of mutual protection. In a like manner the cost of an illness, instead of falling with its full weight upon an individual, is divided among the group that is covered by health insurance.

"HERE THE PARALLEL ENDS"

As an example, ten persons in a thousand may require an appendicitis operation during a given year. Based on an average cost of one hundred dollars, the total surgical bill will amount to one thousand dollars. Hence, as a protection against a concentrated bill of one hundred dollars for this service, each of the thousand persons would contribute one dollar annually, plus the cost of maintaining the organization.

This too is elementary, but it is emphasized because once the basic principle has been considered the parallel between health insurance and other forms of insurance comes to an abrupt end. From this point other insurance travels along a broad, smooth road of experience while health insurance must turn into a little known path that offers only a few markers. The parallel ends and the complexities begin when the insurance actuary goes to work to calculate the risks (sickness) and the premiums (costs).

If there is any person in the world who has a distaste for guessing it is the actuary. In life, fire, or accident insurance the facts he needs have been collected carefully and analyzed systematically for decade after decade. In addition, he has been dealing with contingencies or occurrences that are more or less exact—a person is either alive or not, there has been or there has not been a fire, and so on. These contingencies compared with those faced in calculating the risks and premiums of health insurance are as precise as right triangles.

Until ten years ago the incidence of sickness, except for the communicable diseases, was virtually unknown in the United States. The first extensive study was made by the Committee on Costs of Medical Care and included about nine thousand families. Over a period of a year the families were visited and information was collected on the occurrences of illness, the services received, and the costs. It is this study, plus certain later additions, that provides the foundation upon which the actuary must construct his estimates. It is a foundation that is brittle in many of its parts, not because of defects in the original study but because health insurance itself, as soon as it goes into effect, causes radical changes in the conditions that produced the data.

AN UNKNOWN FACTOR

The families that were studied by the Committee purchased medical care out of their own funds when they needed it or thought they needed it. Obviously they were always aware that they would have to pay the bill. Under health insurance, on the other hand, the situation is different. When there is no worry about the bill there will be a demand for more service. But how much more? That is the unknown factor.

Fortunately during the past five years the experience accumulated in hospital insurance has reduced the area of some of the unknowns. Less fortunately, the full value of the experience has not been realized because too few of the hospital plans collect adequate information. Even though the subscriber to hospital insurance must pay for his medical care, he can get his hospital care free or nearly free. As a result, the number of hospitalizations, when compared with that of the families in the Committee Study, shows an increase of about twenty-five per cent. What the increase would be if medical costs were included remains unknown and, therefore, must be "estimated".

Certain other conditions must be considered in estimating the future demand for medical care. It would be much easier if the population could be considered as a homogeneous mass of protoplasm and all sickness could be lumped in the same manner. But just as population must be resolved into individuals of specified age, sex, and other characteristics, so must sickness be viewed as having individuality and selectivity. Different groups of people have different chances of falling ill.

For example, the occurrence of sickness varies according to age, the least sickness prevailing among the groups between ten and twenty years old. After the age of twenty there is a steady rise in the rate of sickness. If the costs have been calculated from a cross-section of the population they are invalidated if for some reason there is a great preponderance of the older age groups in a scheme of health insurance.

Women, too, are a special hazard. Strangely enough, even excluding the illnesses that attend childbearing, they show a much higher rate of sickness than men—and then proceed to outlive men by over four years! For this reason insurance companies that provide certain types of health insurance usually publish a cost per person that is based upon a ratio of only five per cent or ten per cent of females. If the percentage of females in an employed group is greater than the basic ratio, the premiums are increased accordingly—and the males employed among a predominately female group should excite sympathy rather than envy.

LITTLE DATA FOR ACTUARY

In certain fields of medical care practically no satisfactory information exists for the actuary. The most important gaps relate to diagnostic services, including those of specialists as consultants and the various laboratory facilities such as x-rays. Virtually nothing is known about the

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public's need of full-time nursing services or, as far as adults are concerned, of dental care. Neither is there satisfactory information on vision defects or on the possible need for glasses. These are only a few of the perplexing problems that surround what might be called Rule I in determining medical needs and medical costs: the rule that there must be reasonably accurate data.

There is a second rule, which is likely to be even more difficult to follow. This is the rule that, having estimated certain medical needs, there must be acceptable methods of control so that no artificial stimulus will render the estimate valueless. If sickness were only precise and measurable! The degree to which a risk is insurable depends upon the extent to which the human element can be eliminated. Life is insurable because of the great urge to live and because the individuals who wish to "collect" are minute in number. But sickness is something else. Collecting medical service may become a recreational activity of some people; there are others who enjoy a period of hospitalization as a rest; there are physicians who provide an overabundant service. All these factors raise the question of control.

Some of the health-insurance schemes distribute their benefits with an almost complete disregard of the two rules that have been mentioned. If a scheme can maintain its solvency under these conditions it is probable that the rates are high enough to absorb the results of maladministration — and, therefore, too high. Where the disregard is accompanied by rates that are not unreasonably high it is almost certain that the scheme will run into financial difficulties. This has already happened to some of the hospital-insurance organizations, and each time it occurs there is a loss not only of money but of public confidence in the principle of health insurance. At the other extreme there are insurance plans that are so hedged about with limitations that the value of health insurance to the subscriber is appreciably reduced. Reading certain of the contracts one gains the impression of giving with the right hand and snatching with the left. There are carefully worded clauses intended to limit the demand for services; some of them have been used in other forms of insurance and others are new, but all warrant a critical analysis of their probable effects on the subscribers.

A TROUBLESOME EXCLUSION

One clause that is used excludes hospitalization and medical services for "pre-existing conditions" those physical defects or illnesses that exist at the time subscribers become members of an insurance scheme. Such a rule if enforced usually causes trouble. For it is almost impossible to prove that the onset of a pre-existing condition had a specific date. And it is more difficult to prove that the subscriber knew about the condition when he joined. There is no valid reason for such a clause if the scheme conforms to the common practice of enrolling subscribers in groups—such as the employees of a business concern. When a large enough percentage of a group is enrolled the law of averages functions to counterbalance bad risks, or pre-existing conditions, with good risks. Even in life insurance it is the practice to dispense with the physical examinations of individuals if seventy-five per cent of a given group enroll. This percentage is not too high as a requirement for enrollment in health insurance—those schemes that accept as few as ten or twenty per cent violate the rules of sound statistics because they permit a concentration of bad risks. Nor is the effect of this violation counteracted by a hazy clause that means quibbling with a subscriber about a pre-existing condition when he needs a specific service.

Another common clause excludes "any conditions arising out of pregnancy" during the first ten or twelve months of a subscriber's membership. The reasoning here is difficult to follow. If a plan includes a satisfactory cross-section of the population, or a high percentage of a group of employees and their families, maternity care can be predicted as accurately as any other service. It has been said that this care is not an insurable risk because the contingency may be premeditated. True; but why it becomes insurable if the premeditation is postponed one to three months is not clear. Aside from the fact that many pregnancies are complicated, or that a delivery may require unexpected surgical intervention, maternity care as a part of health insurance is socially desirable, and there is little reason for even partially excluding it.

DISLIKES DEDUCTIBLE CLAUSE

One other device which is used by certain of the schemes deserves special attention. It provides that the subscriber must pay the first portion of the costs of medical services; after he makes this payment he gets the rest of the services free. In theory this device is supposed to function like the deductible clause in automobile insurance. In some instances the subscriber must pay the first five or ten dollars of costs, in others he may be required to pay, over and above his annual premium, a certain sum for each home call or for obstetrical care or other services. In part, the extra payments serve to increase the total contribution of the subscriber, but the main purpose is to curb excessive demands for medical care.

This seems a dubious device. It is unlikely that those who haunt doctors' offices will be deterred by having to make a first payment of a few dollars; once the amount is paid the bars are down. At the same time if payment of this first sum is to be made directly to the physician, it opens the way to rebates and other private arrangements intended to increase his practice and introduces a prenicious competitive element

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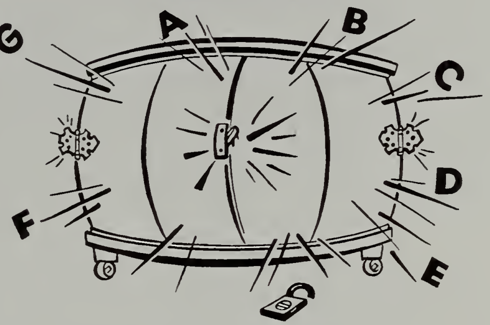

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in medical service. That, however, is only one aspect; another is the premise that five or ten dollars are minor sums. They are—except to the millions of families whose main weekly problem is the transformation of dollars and cents into groceries. To such families the slogan "see your doctor early" has had about the same meaning as a travel bureau's invitation to spend the winter in Honolulu. If the method of partial payment does curb the demand for services the reductions will tend to take place where they are least desirable. To compare an illness with a crumpled fender or a twisted bumper is to forget the important effect of time—one condition is progressive and should be blocked in the interests of the patient and the insuring agency; the other is relatively static.

"FACTOR OF SAFETY"

It is because of the unknowns that certain companies follow the practice of adding to the costs a large "factor of safety"—which means that to the cost of the predicted services are added the costs of everything that the actuaries fear may happen. If at the end of a year the fears have not materialized the company refunds a certain amount of money, and some regard the refund as a "dividend". To consider an overcharge of thirty-five or forty per cent a dividend is a novel interpretation, to say the least. It is no more a dividend than the two dollars received as change when a person buys three dollars' worth of goods and presents a five dollar bill in payment. The practice may have a sales value, but when overcharges are excessie the incentive for the company to conserve funds, stop small leaks, and develop adequate administrative methods is greatly lessened.

One other development deserves much more than the cursory examination it has received thus far. In the majority of non-profit hospital and medical plans the premium paid by the subscriber calls for benefits in the form of services; in the plans offered by various insurance companies the benefits are in cash. The allowed cash benefits may be paid to the subscriber and then, in theory, paid by him to the physician or hospital; or the subscriber may sign an agreement which permits the company to pay the benefits directly to the physician or hospital. On first view it seems to make little difference whether a benefit is received as a service or as cash. But the difference between the two is extreme.

THERE IS A DIFFERENCE

Insurance is supposed to protect people against something specific. What assurance does a subscriber have that a cash payment for a medical service will cover the cost or will pay for a specific percentage of it? None. He purchases a contract that provides one hundred dollars for a certain surgical procedure. Not until he needs the operation does he have any idea of what it will actually cost—it may cost the amount or double the amount of his cash benefit. The subscriber may think that the fee should conform to the cash benefit listed in his contract. If he finds that it does not, he is likely to feel cheated. And the result is likely to be antagonism between physician and patient—antagonism which may or may not be justified.

There is also another side of the picture. When people who are insured begin to view medical care in terms of cash values, rather than of necessary services, a new and insidious element is introduced. One hospital plan frankly states that if a member chooses accommodations that are less expensive than the amount guaranteed the difference will be paid in cash. In effect, this means a bonus for each day spent in the hospital by any patient who is not an employed member of a family. It will be a sad time for patients, physicians, and hospitals when sickness commands a net cash value instead of treatment according to the patient's needs. How much more satisfactory is the forthright plan that assures the thing for which health insurance has been devised—services if and when they are needed.

What has been said warrants the conclusion that health insurance is now a composite of genuine social values, impractical hopes, and sharp commercial practices. Though the underlying principle is sound it becomes corrupted when aims lose contact with realities and administration is maladroit. Too often the excuse given for failure or for obvious mistakes is that health insurance is a new and vast field and that administrators, like Columbus, sail into the unknown. It is forgotten that Columbus started with a certain knowledge of astronomy and an ability to sail a ship, and he probably carried an anchor or two. Must there intervene between the adoption of a social principle and its appearance as a satisfactory social institution a period of bewilderment, of circular motion, of dashing off at tangents? Or in health insurance is it possible to steer a course that attempts neither too much nor ventures too little, a course between recklessness and timidity?

A FAMILY PROBLEM

Medical care is a family problem. When health insurance includes employed persons but excludes their dependents it has a sharply limited value. There are enough limitations that have substance without adding any that are as artificial as this one. It is true that employed persons are better risks; but the problem is not solved by any process that serves to select the best risks in a population, leaving out those whose needs are more acute.

In a scheme of health insurance that covers a comparatively small group—twenty or thirty thousand—many things can and should be tried. Only through such projects is it possible to learn what is now unknown about public needs for

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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services—consultant, diagnostic, and other special kinds—and more effective administrative methods. These small schemes should be conceived as the laboratories of health insurance. Their results should show how and where there may be safe expansions. Meanwhile, and without waiting for the laboratories to give final answers to all questions—which means waiting indefinitely—there are specific services that should be offered to large groups of the population.

"LOGICAL FIRST STEP"

Patients in general hospitals are roughly classified as surgical, obstetrical, and medical. The logical first step in health insurance—and one that offers substantial progress in solving a major part of the public's problem—is to include hospitalization and physicians' services **for surgical and obstetrical cases only.** The importance of medical cases is granted, but until there are better methods of control the inclusion of this class of patients is a threat to solvency. The statement that hospital insurance results in a twenty-five per cent increase in the number of cases hospitalized is only a part of the story. The significant and perturbing fact is that surgical cases increase only about ten per cent while medical cases increase over fifty per cent! The average person does not look forward to necessary surgery, but a great many people go to hospitals for minor illnesses because they regard a common cold as a way "to get their money's worth". Undoubtedly the hospital is an excellent place to treat a cold or to provide escape from household drudgery, but is it fair to load a system with the costs of elective hospitalization? The story of the woman who entered a hospital and, after telephoning to three friends, called for a bridge table may be very funny—but not to those who administer hospital plans, and even less so to those whose annual subscriptions pay the bill. Theoretically, the burden of control can be placed upon the patient's physician, for according to the usual rule he must approve hospitalization; actually, he cannot occupy a dual position, that of satisfing the patient and at the same time protecting the insurance fund against trivial cases. Some insurance plans now cover hospitalization for medical cases but require the patient to pay his physician directly. This, as a method of control, is inconceivably weak because the physician's charges for home or for hospital treatment are not appreciably different from medical cases, and therefore the incentive to go to a hospital remains the same.

INTERESTING DATA

Surgical and obstetrical cases comprise three-fourths of all the patients in general hospitals and account for approximately forty per cent of the national bill for medical care. The existing data make surgery and obstetrics the most insurable of contingencies and in these cases the human element is reduced to a minimum. If it were

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possible to assign specific weights to the different services that make up the whole problem of medical care, it might be said that this first step would solve forty per cent of the problem. Actually it would be more valuable than that because of the protection it affords against concentrated major costs.

Notwithstanding the fact that some insurance companies offer hospitalization for ninety days, the general needs of the public will be met by hospitalization up to thirty days. The main value of the ninety-day offering is to increase sales, since a thirty-day period is sufficient to cover over ninety-seven per cent of hospitalized cases. National statistics are often quoted to prove that a large per cent of cases remain in hospitals over thirty days, but the quotations fail to mention that these figures include patients in mental and tuberculosis institutions. Health insurance is not intended for such patients and the average general hospital does not admit them for long periods of care.

SECOND STEPS SUGGESTED

As a second step—after enough time has gone by to permit those who are running the plan to acquire administrative experience and to correct defects in organization—the health-insurance program should embody **the services of general practitioners in offices and homes.** The data concerning the need for these services are in reasonable agreement and enough work has been done on fair methods of controlling excessive services to show that this factor offers no serious obstacle. Although there is a prevalent belief that general home and office care is a relatively minor economic burden, the evidence is to the contrary. Among families of average size about a third report five or more illnesses in a year which require ten or more home or office services.

Home and office care is emphasized for its preventive values in early diagnosis and treatment. To give but one example: a study of appendicitis cases has shown that those treated surgically within the first twenty-four hours after the onset of the illness undergo an average hospitalization of eight days and the fatality rate is one per cent. But if the surgical treatment is delayed, for one reason or another, until the fourth day, the average period of hospitalization rises to sixteen days and the fatalities rise to nine per cent. Usually it is the general practitioner who sees the case first; if his services are readily available he may see it early and the probable savings are large in terms of lives, days of disability, and costs of services. Home and office care also make up in part for the deficiency of a system that excludes the hospitalization of medical cases. In order to counteract this deficiency still more the services of the visiting nurse should be added; her visits are educational, her work has a high value in aiding the treatment of patients in their homes, and when she is available patients may be discharged earlier from hospitals to return to their homes.

The surgeon, the obstetrician, the general practitioner, the visting nurse, and the hospital for surgical and maternity cases—these constitute a clean-cut program of medical care that may be covered by health insurance with reasonable safety. More is necessary but much more needs to be known before all of the other special

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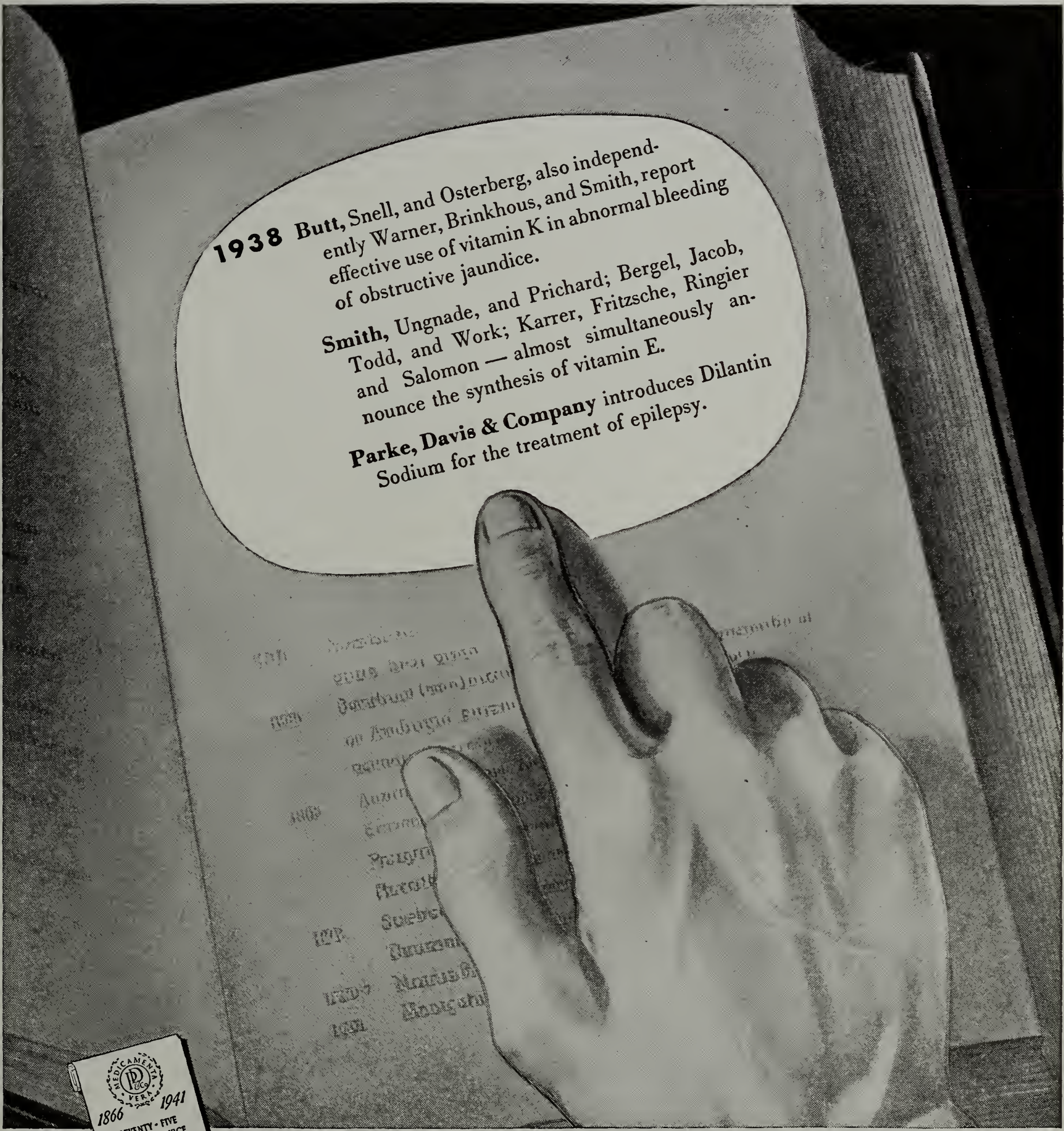

1938 **Butt,** Snell, and Osterberg, also independently Warner, Brinkhous, and Smith, report effective use of vitamin K in abnormal bleeding of obstructive jaundice.

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Health insurance is in motion and behind it there is a dynamic power that has its source in the increasing public demand for relief from the economic hazard of sickness. There are those who, living in their own little world of absolutes, regard the word "change" as a synonym for "calamity". There are others who see in the demand the possibilities of a quick and complete solution of all our problems of health. But those who try to translate the public demand into minute details of organization, administration, and costs for millions of people approach the problem with the healthy apprehension it deserves. They are neither angels nor fools, they are realists; and the task is huge.

Toledo—Dr. Louis R. Effler spoke on "Some Ancient Symbols", at a meeting of the Lions' Club.

Cincinnati Health Department Seeking Physicians for Medical Staff

The Cincinnati Health Department, City Hall, Cincinnati, has announced openings for physicians on its staff with annual salaries ranging from $2,640 to $3,360, plus transportation allowance of $240 per annum. An applicant must be between the ages of 23 and 50, a white, male citizen, graduate of a recognized medical school and licensed to practice medicine in Ohio. The work will include any or all of the following: Surveillance over communicable diseases; infant and child welfare work; care of the sick poor, epidemiological surveys of communicable diseases; examination of applicants for work certificates, school teachers and participants in athletic events; medical school inspection; vaccination of indigents. Members of the medical staff of the department are eligible to participate in the Cincinnati public employes retirement system, the announcement stated.

Dr. Frost Heads Blind Commission

Dr. A. D. Frost, Columbus, has been elected president of the Ohio Commission for the Blind. Other members are: Walter Schmitt, Cincinnati; Henry J. Robison, chief of the Division of Social Administration, State Department of Public Welfare; Byron Redman, Columbus; Mrs. J. D. Johnson, Celina, and W. G. Scarberry, superintendent of the Ohio State School for the Blind.

Troy—By a vote of 6,466 to 404, Miami County voters voted to accept a $1,250,000 bequest from Jacob Dettmer to build a county hospital midway between Piqua and Troy. A one-mill tax levy for the maintenance of the proposed new hospital carried by a vote of 6,159 to 471. A suit is now pending in the Brooklyn, N.Y., courts attacking the legality of the bequest.

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Frequently, the Headquarters Office receives inquiries from physicians seeking assistants, partners, or men qualified for positions on private hospital staffs.

If physicians seeking new opportunities or desiring to change locations will file their names with that office, an effort will be made to furnish them with suggestions and at the same time render a service to members seeking assistants, etc.

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Do You Know - - -

A preliminary report on the case of the Akron family in which five children were stricken with poliomyelitis, three of them fatally, appears on page 1013 of the September 20, issue of *The Journal of the American Medical Association.* Entitled "Multiple Cases of Tonsillectomy and Poliomyelitis", it was prepared by Dr. Carl E. Krill, Akron and Dr. John A. Toomey, Cleveland.

* * *

George Fishback, secretary-manager of Central Investigation Bureau of Akron, Inc., and secretary of the Akron Hospital Council, has been appointed executive secretary of the Ohio Hospital Association.

* * *

Dr. Herbert Z. Lund, Rockefeller research fellow at Harvard University, has been appointed pathologist at the Cleveland City Hospital, succeeding Dr. Herbert S. Reichle, who failed to return from a mysterious trip to Mexico City.

* * *

Dr. Norman B. Muhme won the golf championship of the Toledo Academy of Medicine for the fourth consecutive year.

* * *

The week of September 1 was designated as Hospital Service Week in Cleveland in recognition of the accomplishments of the Cleveland Hospital Service Association which now has over 500,000 subscribers.

* * *

Dr. J. C. Tritch, veteran Findlay physician, who has been practicing medicine for 64 years, served in an advisory capacity for a women's organization which founded Findlay's first hospital 52 years ago.

* * *

Dr. Russell L. Haden, Cleveland, was one of the guest speakers at the 92nd Annual Meeting of the Indiana State Medical Society, September 23-25 at Indianapolis. He spoke on "More Common Blood Dyscrasias Seen by the General Practitioner".

* * *

After four years as assistant secretary and medical advisor of the Ohio Public Health Association and associate editor of *Ohio Public Health,* Dr. Donald D. Shira has resigned to return to private practice at LaRue. He will continue as medical director of *Ohio Public Health.*

* * *

In addition to his duties as assistant chief medical officer of Selective Service for Ohio, Major Claude S. Perry, M.C., U.S.A., Columbus, has been designated as State Reemployment Officer, with the responsibility of directing efforts of local draft boards in obtaining employment for draftees who have been released from military service.

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The Physician's Bookshelf

Necropsy, A Guide for Students of Anatomic Pathology, by Bela Halpert, M.D., Visiting Pathologist, Charity Hospital, New Orleans *(C. V. Mosby Company, St. Louis)*, is a text based on the principles of materials used by Anton Ghon. The material is arranged in the sequence in which the operations are performed and then there is given the method of assembling and evaluating the data. This is a very handy volume for pathologists and coroners as well as those who have occasion to do this type of work occasionally.

New and Non-official Remedies ($1.50. *American Medical Association, Chicago, Illinois)*, contains descriptions of articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1.

Body Mechanics in Health and Disease, by J. E. Goldthwaite, M.D., L. T. Brown, M.D., Loring T. Swaim, M.D., and J. G. Kuhns, M.D. ($5.00. Third Edition, completely revised and reset, *J. B. Lippincott Co., Philadelphia)*. Describes the fundamental principles in the study of patients suffering from chronic diseases. The new feature of this edition is the application of these same principles to the study of the healthy or nearly healthy individual. There is a chapter on the heart and circulation as related to body mechanics by William J. Kerr, M.D., of the University of California.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1940. ($1.00. *American Medical Association, Chicago)*. This volume contains not only all the published reports of the Council for the preceding year but also reports on products which were not deemed important enough to be published in *The Journal.* Council reports may be classified in general as those of omission or rejection, preliminary reports and status reports on drugs or on various therapeutic and pharmacologic problems.

Text Book of Bacteriology, by R. W. Fairbrother, M.D. ($5.00. Third Edition. *Mosby Company, St. Louis)* is an outline of the medical aspects of bacteriology. The book is so designed as to place the emphasis upon the application of bacteriology to the medical sciences and not the preparation of a specialist in the subject.

Microbes Which Help or Destroy Us, by Paul W. Allen, Ph.D., D. Frank Holtman, Ph.D., and Louise Allen McBee, M.S. ($3.50. *C. V. Mosby Company, St. Louis)*, is produced for the average layman's need of becoming "microbe conscious". It teaches us to defend ourselves against these powerful agencies and thus to avoid disease,

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hunger, exposure and oppression. This information contributes directly to a dynamic culture so badly needed in this country in these days.

Sagebrush Dentist as told by Dr. Will Frackelton to Herman Gastrell Seely. ($2.50. *A. C. McClurg & Co., Chicago)* is the fascinating story of a tenderfoot dentist who saw the last days of the winning of the West. It is a real he-man story of days that are gone.

Principles of Microbiology, by Francis E. Colien, M.D., and Ethel J. Odegard, R.N. ($3.00. *C. V. Mosby Company, St. Louis)*. This text is very definitely designed for the student of nursing and should occupy a very worthy place in any school of nursing.

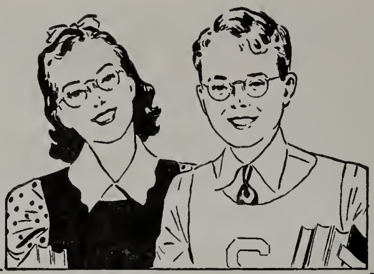
Synopsis of Applied Pathological Chemistry, by Jerome E. Andes, M.S., Ph.D., and A. G. Eaton, B.S., M.A. ($4.50. *C. V. Mosby Company, St. Louis)*, provides a practical, simple, easily read text on the application of pathological chemistry to clinical medicine and therefore will come in most handy with those of us who feel a need of reviewing this important subject. And who among us does not?

Handbook of Communicable Diseases, by Franklin H. Top, M.D., and Collaborators. ($7.50. *C. V. Mosby Company, St. Louis)*, is a handy reference for all persons whose professional duties necessitate contact with common communicable diseases. The authors with the large amount of material at their command in Detroit have given us a most worthwhile volume.

Cardiac Clinics, by Frederick A. Willius, M.D. ($4.00. *C. V. Mosby Company, St. Louis)*, is a series of carefully selected cases that form the basis of a text which brings to the general practitioner of medicine a solution for some of the problems in heart disease. It is refreshing to read a modern medical book modified by the practical consideration of disease as it is encountered at the bedside.

Doctors Anonymous, by William McKee German ($2.75. *Duell, Sloan, Pearce, Inc., New York)*, is the story of the doctor's doctor—the pathologist—by the president of the Ohio Pathological Society. The author tells the story from every angle. In addition to the history of pathology he takes you on a tour of analysis through every section of a modern laboratory, recounts scores of dramatic stories all of which have a vital part in paying tribute to these men of whom the public hears so little and yet to whom it owes so much.

Manual of the Diseases of the Eye, by Charles H. May, revised with the assistance of Charles H. Perera, M.D. ($4.00. A *William Wood Book, Baltimore)*, is the 17th edition extensively rewritten with additional colored plates and illustrations. Everyone is familiar with this text since it has been with medical students since 1900.



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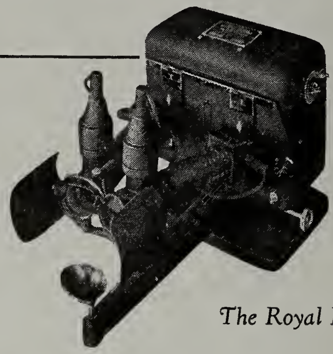

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N. Y. State Jour. Med., Vol. 35, No. 11,590 Arch.
Otolaryngology, Mar. 1936. Vol. 23, No. 3,306

Buckeye News Notes

Ashtabula—Dr. C. C. Crosby has been reappointed health commissioner of Ashtabula County.

Cincinnati—Members of the staff of Jewish Hospital held a dinner in honor of Dr. Mortimer Herzberg, who recently retired after having been head of the hospital's clinical laboratory for 18 years.

Columbus—Dr. Mary A. Graber has been appointed chairman of the Franklin County Council on Nutrition for National Defense.

Delaware—Dr. G. F. Moench, health commissioner of Delaware and Union counties, has been awarded the degree of master of science in public health by the University of Michigan.

Elyria—Dr. W. B. Hubbell has retired after having practiced medicine for 43 years.

Fostoria—Dr. Charles E. Bender has moved to Seattle, Wash., where he is assistant director of the student health service of the University of Washington.

Gallipolis—An interesting review of his recent 21-day trip through Mexico and Cuba was given by Dr. C. E. Holzer at a meeting of the Rotary Club.

Greenville—A reception was held September 7 at Wayne Hospital, where a $60,000 building addition was recently completed.

Lorain—Dr. Lorin E. Kerr, Stambaugh, Mich., has been appointed health commissioner of Lorain County, succeeding the late Dr. F. R. Dew.

Middletown—The new local health commissioner is Dr. J. A. Carter, Batavia, who had been health commissioner of Clermont County since 1936.

Mt. Cory—Dr. A. E. King has been appointed a member of the Hancock County Board of Education.

Toledo—"The New Deal in Medicine", was the topic discussed by Dr. A. A. Brindley, Fourth District Councilor of the Ohio State Medical Association, at a meeting of the Norwalk Kiwanis Club.

Toledo—Dr. K. C. McCarthy has returned home after eight months' service as anesthetist with an American medical unit in a hospital near London, England.

Waynesville—Dr. A. E. Stout has resumed practice after having been confined to his home for two months from injuries received in a traffic accident.

Wooster—Dr. J. J. Sutter, health commissioner of Wayne County, addressed the Clinton Grange at Shreve on "Supervision of Health in the Schools".

Wooster—Dr. G. W. Jacoby, Jr., formerly of Ashley, has been appointed director of the Student Health Service of Wooster College.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 November, 1941 No. 11

JONATHAN FORMAN, M.D., *Editor*

CHARLES S. NELSON, *Managing Editor* ALICE B. HANEY, *Advertising Manager*

GEORGE H. SAVILLE, *News Editor*

Cardiac Disease and Foci of Infection

N. P. FROLKIS, M.D.

DURING the course of routine physical examinations for new employees the high frequency of cardiac disease noted was rather striking. The frequency of the lesions was all the more striking because of the apparent health of these people.

In this series 270 cases were studied. Of these 144 were female and 126 were male. The distribution according to age is, as one would expect, predominantly under 35 years of age. In the female group 106 cases, or 73 per cent of the total were under 35 years, whereas only two cases, or 1.3 per cent, were over 50 years of age. In the male group 112 cases, or 88 per cent, were under 35 years of age whereas only four cases, or 3.2 per cent, were over 50 years of age. In other words 218 cases of our total group, or 80 per cent of our total cases, were under 35 years of age.

All of these people submitted to the routine physical examination with an amused air of tolerance. They were all sure that they were in the best of health and were rather shocked to find out that there was something wrong with them. All the applicants had been questioned as to their state of health before the examination. The unanimous answer was that they were in perfect condition.

In the series of 270 cases studied, 40 cases, or 14 per cent of the total, had some cardiac disease. The cases of functional heart murmurs were not considered in this study. The group of 40 cases was then divided into two subdivisions, one division of 11 cases consisting of hypertensive heart disease and one division of 29 cases consisting of rheumatic heart disease.

The Author

● Dr. Frolkis, Akron, Ohio, is a graduate of Western Reserve University School of Medicine, 1936; member, Ohio State Medical Association and the American Medical Association.

For obvious reason the study of these two groups was made independent of each other. The cases that were classified as hypertensive heart disease all had a diastolic pressure over 100 mm. mercury. It is true that no further investigation was made in these cases and for this reason we are probably dealing with arterio sclerotic as well as functional hypertension. Six of these cases were females and five were males. All of these cases with the exception of one were in their third, fourth, and fifth decade of life.

Table I shows the distribution of physical findings in the hypertensive cases. In most cases valvular involvement was absent. As is apparent from the table the findings of greatest importance is that of cardiac enlargement. In those cases where split sounds were found, the cardiac reserve was lower than in cases with uncomplicated cardiac

TABLE I

Hypertensive Heart Disease Cases

Total 11

Symptoms	No. of Cases
Cardiac enlargement to the left	11
Split 1st sound	3
Split 2nd sound	1
Apical systolic murmur	1

Submitted April 8, 1941.

hypertrophy. These patients were not cognizant of their hypertension, but upon questioning it was revealed that many of them had low cardiac reserve, low exercise level, and in several cases intermittent claudication. Eye ground examination and examination of the peripheral vascular system showed in many cases arteriolar and arterial sclerosis. In these cases where the vascular sclerosis was present, renal symptom of nocturia and so forth were present. This group as a whole did not represent the terminal or even the invalid stage of hypertension. It is doubtful if a medical regime of any sort could be used as a prophylactic agent in these cases.

All of the five men that were examined were heavy tobacco users and the whole group were definitely overweight. The elimination of tobacco and the institution of low caloric intake would probably be the only therapeutic measures which could be instituted in these cases to prevent any further elevation of blood pressure, and in some cases to induce some reduction in it.

In table II, the 29 cases of rheumatic heart diseases are tabulated according to physical findings. The most common finding was the presence of a systolic murmur associated with the enlargement of the heart to the left. This can easily be explained on the basis that the average age of our patients was only 21.28 years, that is, our patients had developed mitral insufficiency but not yet developed mitral stenosis. None of these cases showed any heart failure or irregularity of the cardiac rhythm. Twenty-one of our cases were female and eight were male. Two cases were in their second decade of life, 17 in the third, seven in the fourth and 13 in the fifth. No cases were included which had only an apical systolic murmur and no other findings. For this reason it was believed that we were dealing here with organic cardiac disease and not with functional murmurs.

TABLE II

Rheumatic Heart Disease

Symptoms	No. of Cases
Enlargement to the left	27
Enlargement to the right	12
Apical systolic murmur	24
Presystolic murmur	9

It was thought that it would be very interesting to attempt to link the present organic heart disease with a history denoting rheumatic disease incurred some time in the past. Special emphasis was placed in the history on recurrent upper respiratory infections, rheumatic fever, chorea, "growing pains", etc. But because all of these individuals were applying for work it was not at all surprising that no history of these diseases could be gotten. For this reason it was thought better to disregard the history in favor of the objective findings present in the oral cavity. Special note was made of the most common foci of infection namely; teeth, pharynx, and tonsils.

Table III shows in summary the teeth findings of the cardiac group as compared to the control group. No marked difference between the two groups is very evident. If the cases of adontia be added to the cases with poor teeth we see that 27 per cent of the cardiac group fall in this class as compared to 21 per cent of the control group. We therefore see that those cases with cardiac involvement have a slightly higher incidence (6 per cent) of bad teeth then the normal control group. But the significance of these findings is quite doubtful. It is well to point out here also that no X-ray examination of the teeth was made.

TABLE III

Teeth

	Cardiac involvement	Control group
Good	45%	52%
Fair	28%	27%
Poor	19%	17%
Adontia	8%	4%

For this reason dental abscesses might then have been present in the cardiac group in a higher per cent than in the control group.

Table IV classifies the pathological findings in the pharynx into the groups; pathological findings, including edema of the pharynx, pharyngeal adenopathy, and injection in one group; and normal pharyngeal findings in the other. It is hard to draw any conclusions from the above findings because it is seen that the control group has a 4 per cent higher incidence of these infections than the group with cardiac involvement.

TABLE IV

Cardiac cases	Control Cases
Pathology findings: 32% Edema, adenopathy, injection	36%

TABLE V

Tonsillar Findings

	Cardiac	Control
Normal	29%	32%
Recurrent tonsillar tags	22%	10%
Cryptic and Hypertrophic with exudate	15%	23%
Tonsillectomies	34%	35%

It might be that the cardiac patients have a more frequent recurrence of pharyngeal infection, but because the history was not dependable no conclusion could be made.

Tonsillar findings enumerated on Table V show that only 29 per cent of all the cases examined with cardiac involvement have absolutely noninfectious tonsils. This figure seems very astounding until it is compared with the control group, where only 32 per cent of these cases have no tonsillar pathology. It is interesting to note that 56 per cent of the cases with cardiac involvement have had tonsillectomies, as compared to 45 per cent for the normal group.

And it is rather important to note that the cardiac group shows 22 per cent recurrent tonsillar tags with exudate containing crypts, as compared to 10 per cent in the normal group. It might then be concluded from this data, that there are very few individuals with normal tonsillar findings in this vicinity, but in those individuals with rheumatic diathesis the recurrent infectious adenoid tonsillar tissue is more frequently seen than in the control group.

To summarize the above:

1. Twenty-nine cases of rheumatic heart disease were observed during the course of physical examination of 270 apparently normal individuals.
2. Because these cases were all quite young no cardiac embarrassment was noted.
3. None of the individuals who were examined knew before being examined that they had cardiac disease.
4. Examination of the common foci of infection shows nothing of significance when comparison studies between the cardiac group and the normal control group were made. Although this study is far from complete it makes one wonder whether or not the theory of foci infection in rheumatic heart disease has been ascribed its rightful importance.
5. The importance of routine physical examination is well pointed out by the above findings.

Tuberculosis and Trauma

In a survey made a number of years ago of 500 consecutive patients admitted to Koch Hospital for pulmonary tuberculosis, only thirty-two instances were found in which there was any history of associated trauma. In more than 50 per cent of these the injury was to an extremity or remote portion of the body; the time elapsing between injury and subsequent diagnosis of tuberculosis varied from one week to eighteen years; in no instance was the patient known to be free from tuberculosis before the injury. No evidence was obtained to indicate that trauma played any definite part in the development of pulmonary tuberculosis in an individual previously free of the disease.—L. R. Sante, M.D., St. Louis; Minn. Med., Vol. 24, No. 10, October, 1941.

The Electrocardiogram

Whenever possible, the general practitioner will get the most satisfactory results if he refers patients for electrocardiograms to a physician associated with a cardiac clinic. Not everyone who has a electrocardiograph is able to interpret the electrocardiogram accurately. Often too much is read into the electrocardiogram because criteria for interpretation are absent. In order to make the most intelligent report upon a patient, the cardiologist should not only make and interpret the electrocardiogram but take the history himself, and do his own physical examination. Then he can suggest in his report such further methods of diagnosis as are revealed by a complete and thorough study. It is desirable that an electrocardiogram report be made in this complete way. Often, however, the physician rendering an electrocardiogram report to a general practitioner assumes that the latter is qualified to a take a detailed cardiovascular history and to do a thorough cardiovascular physical examination. Such an assumption is usually justified, but, unfortunately, it sometimes is not. Therefore the cardiologist should consider it his responsibility not only to render a conservative report of the findings on the electrocardiogram, but also to send a supplementary report to assist the general practitioner in the diagnosis, prognosis, and treatment. If this supplementary report is not rendered, the general practitioner unacquainted with the electrocardiogram may fail to interepret the report properly. He may, for example, become confused by negative findings in the electrocardiogram report and interpret these as indicating the absence of disease, whereas such interpretation may be incorrect.

The electrocardiogram has a very definite and important place in the diagnosis of cardiac conditions. However, some authors suggest that dependence upon the electrocardiogram should not be stressed. These writers assert, what is true within certain limits, that the physician skilled in electrocardiography who has carefully studied the associated clinical manifestations of a disordered heart seldom needs to resort to the electrocardiogram in diagnosis. Such a statement should not be misconstrued by the general practitioner as meaning that the electrocardiogram is of little significance. On the contrary, it is of considerable value when evaluated in connection with a careful history, with a thorough physical examination, and with the other adjuncts necessary to an exhaustive study. Certainly, a cardiologist in Boston, no matter how competent in diagnosis, would not consider sending a report to a cardiologist in Philadelphia without having taken an electrocardiogram. The electrocardiogram has not only an important but an indispensable part in a thorough cardiac study.—John H. Rowland, M.D., New Brunswick; Jour. Med. Soc., N.J. Vol. XXXVIII, No. 10, October, 1941.

Surgery for the Patient With Disease of the Thyroid and Impairment of the Heart

JOSEPH M. MILLER, M.D.

THE medical and surgical management of patients with evidence of disturbed cardiac function and goiter often proves a serious and perplexing problem. Many investigators have emphasized the important direct relationship between alterations in cardiac function and efficiency and the hyperactive thyroid.

Percy has presented a simple working classification to include all patients with hyperthyroidism and all types of heart disease. These patients are divided into those who have (1) hyperthyroidism without evidence or history of cardiac disease (2) hyperthyroidism with a history and perhaps some evidence of cardiac disease (3) cardiac phenomena due to luetic, hypertensive or arteriosclerotic changes with congestive failure precipitated by hyperthyroidism and (4) "masked" hyperthyroidism, in which organic heart disease is not present, but edema and fibrillation are the result of long-standing hyperthyroidism of mild degree.

No matter if primary heart disease is present or not, a complete analysis of this type of patient must be in terms of altered, increased metabolism. A certain degree of cardiac disturbance is almost always associated with hyperthyroidism in each of the previously mentioned groups. Tachycardia, demonstrable enlargement of the heart by the roentgenogram, arrythmias, especially auricular fibrillation, and congestive heart failure of varying degree are important portions of the syndrome in the latter phases of the disease. Important also in these changes is the increase in pulse pressure, another indication of the increased minute output of the heart. Correlation of these several cardiac signs reveals that they are the resultant of an altered body economy dictated by an increased metabolism.

Many investigators have made contributions to the study of the histopathology of the heart associated with over-activity of the thyroid. Fatty and parenchymatous degeneration, perivascular round cell infiltration, fibrosis, and granulation tissue formation are considered specific by some authors. These changes also have been found in the hearts of rabbits in which hyperthyroidism was experimentally produced. However, other investigators fail to report such changes, and in the midst of this apparent confusion, Rake and McEachern make a potent suggestion. They feel that perhaps too much emphasis has been placed upon the study of structural change in the myocardium with consequent neglect of important alterations in the metabolism and function of the muscle fibres. Hoet and Marks, Defauw, and Andrus were unable to find glycogen either microscopically or analytically in the myocardium where hyperthyroidism was produced experimentally. A close analogy to the liver may therefore well be present, in which with depletion of the glycogen reserve, significant changes in hepatic function may well be observed.

The Author

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The clinical features presented by these patients have already been briefly considered. The rate of the heart beat is accelerated and cardiac action may be tumultous. Enlargement of the heart, owing to hypertrophy, dilation, or a combination of both, may be present. It should be borne in mind that such an increase in cardiac size may be the result of associated heart disease. Likewise, murmurs heard over the cardiac area may be the consequence of concomitant valvular dysfunction of varied etiology with superimposed damage caused by the thyrotoxicosis.

The most common disorder of cardiac rhythm in these patients is auricular fibrillation. Pemberton and Williams have noted that the persistence of this particular arrythmia following thyroidectomy is suggestive of the presence of an accompanying primary cardiac disease, residual cardiac damage from prolonged hyperthyroidism, or recurrent thyrotoxicosis of exophthalmic goiter. Patients of middle age presenting themselves with this arrythmia must be suspected of being in the hyperthyroid state. When the latter is present, it usually is the result of a hyperfunctioning adenomatous goiter.

Most of these patients are prepared for operation in about two weeks. They are not hospitalized unless congestive failure is present. Lugol's solution is administered as indicated to patients with exophthalmic goiter and to the more severely ill patients with hyperfunctioning adenomatous goiters. A temporary inhibition of thyroxine production may ensue in the last group

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Read in part before the Marion Academy of Medicine, March 4, 1941.

when iodine is given. When quinidin sulphate is used in the treatment of auricular flutter, caution must be employed, and the patient must be watched for idiosyncrasy to the drug. However, the majority of patients will respond satisfactorily to a program of rest and sufficient iodine. Auricular fibrillation of itself demands no special treatment.

Congestive heart failure calls for bed rest. Limitation of fluids to 1200 to 1500 cc. for 24 hours, a low salt, high caloric diet, and the judicious use of diuretics such as potassium nitrate and salyrgan will effectively cause elimination of the edema. Iodine must be given as indicated. Digitalis must be used with caution in these elderly people with hyperthyroidism and cardiac decompensation. A thorough trial of dehydration without the use of digitalis should be made and usually good results will be attendant upon such therapy. Indications for the careful use of digitalis include the persistence of a rapid auricular fibrillation or failure to attain compensation after a reasonable period. The drug should be discontinued for at least four or five days before operation is undertaken.

Once compensation has been attained, **it is vitally necessary that the patient be up and about in a limited fashion for several days.** This period of activity not only decreases the susceptibility of the patient toward post-operative pulmonary complications but also affords some test of cardiac reserve. A patient who is unable to be out of bed surely is unable to withstand the strain of an operative procedure upon the thyroid.

Such patients form the major contribution to the mortality in thyroid surgery. However, even though the chances of recovery may seem minimal, the surgeon must recall that his estimate of risk is subject to error and that each patient must be afforded an opportunity to escape the status of a "cardiac cripple".

The prime cause of death in a recent series of these patients who succumbed in the postoperative period was bronchopneumonia. Postmortem studies in some of these patients also revealed an atrophy of the liver. The value of precautionary measures to obviate these results should again be emphasized. This statement is particularly true when atrophy of the liver is considered inasmuch as the relation of hepatic failure to surgical risk in hyperthyrodism has not commanded the attention it deserves.

Because of the increased surgical risk, the avoidance of technical errors during the course of thyroidectomy will again be stressed. The choice of anesthetic is an important consideration. Local infiltration of 0.5 per cent procain hydrochloride supplemented by inhalation of a combination of nitrous oxide and oxygen has proved quite effective. The susceptibility to postoperative pulmonary complications is therefore reduced by avoiding prolonged inhalation anesthesia. Also, the patient can be awakened after resection of the first lobe so that determination of the functional integrity of the homolateral inferior laryngeal nerve may be made. Unsupplemented local anesthesia is clearly indicated for those patients with obstructive dyspnea.

Extremely toxic patients with limited reserve and patients who have had severe congestive heart failure may have to be subjected to lobectomy to minimize the hazard.

Early recognition and prompt treatment of complications in the postoperative period will materially aid in the reduction of mortality. The employment of a B. L. B. apparatus to administer a mixture of 80 per cent helium and 20 per cent oxygen has been particularly effective in treating cyanosis of obstructive origin and avoiding tracheotomy.

It is freely admitted that the operative risk in such patients is elevated. However, the risk seems justified when the mortality statistics are reviewed. Effective administration of iodine and a carefully enforced program of preoperative preparation for these patients will help reduce the mortality in this particularly handicapped group of patients.

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Hypoproteinemia

The clinical conditions in which hypoproteinemia is important are the diseases which at some time or another manifest edema, such as renal disease (especially nephrosis), cardiac disease, toxemia of pregnancy and hookworm disease.

Edema appears when the total protein reaches 5 (plus or minus 0.3) Gm. per hundred cubic centimeters or when the albumin reaches 2.5 (plus or minus 0.2) Gm. The protein may become reduced because of:

1. An insufficient intake of protein due to inadequate diet, clinically seen in starvation, hookworm disease, toxemias of pregnancy and cardiac disease.
2. Excessive loss of protein due to proteinuria, diarrhea, hemorrhage or loss to a fetus (particularly twins).
3. Excessive metabolic wastage or protein destruction due to chronic infections or cachectic states.
4. Inadequate formation of proteins, of which very little is known but which apparently occurs in some forms of hepatic disease.—John A Schindler. M.D., Monroe; Wisc., Med. Jour., Vol. 40, No. 10, October, 1941.

Pernoston, An Intravenous Barbiturate

BERNARD R. BONNOT, M.D.

AN intravenous barbiturate which comes ready to administer, which is immediately effective, which has a wide margin of safety, and which has been proven through extensive clinical use, is pernoston sodium. I wish to present my observations while using it over a two-year period in the obstetrical service of St. John's Hospital in Cleveland.

Pernoston sodium is accepted by the Council on Pharmacy and Chemistry of the American Medical Association and is included in the current issue of New and Nonofficial Remedies. About pernoston sodium N.N.R. states: "It is the sodium salt of secondary butyl bromallyl barbituric acid. Its actions and uses are essentially similar to those of barbital, but pernoston is more active and is used in correspondingly smaller doses. It is promptly absorbed, and is rapidly changed and destroyed within the body. In therapeutic doses it is said to produce no demonstrable toxic effects on the heart, lungs, blood vessels and kidneys; it does not interfere with the physiological activities of these organs."

In the descriptive folder accompanying the package we find: "Pernoston is quickly broken down within the body. Not more than one-half of one per cent of the unchanged pernoston may be recovered from the urine after therapeutic dosage. Within the organism 12 to 17 per cent is transferred to non-toxic and non-active butyl acetonyl barbiturate, which is excreted as such; the remainder is completely destroyed.

"The hypnotic state induced by pernoston is not fitful; sleep is relatively deep, depressing the metabolic activities to a low ebb which permits of adequate physical and mental recuperation.

"Pernoston sodium may be used for the control of convulsive seizures such as status epilepticus, eclampsia, tetanus, or those following administration of convulsant drugs such as picrotoxin, cocaine, novocaine or strychnine. It may also be indicated to induce hypnosis in cases characterized by delirium, acute mania, delirium tremens, acute thyrotoxicosis and similar conditions."

METHOD OF INJECTION

Pernoston sodium is given intravenously but may be given intramuscularly. When given by the latter route the beneficial results are delayed and often less certain. Pernoston sodium comes in a 10 per cent solution, in ampoules containing 2.2 cc. (3¼ grains), ready for injection without any dilution, mixing or other manipulation. The rate of injection is important. The more slowly the injection is given the more striking are the results. No more than 1 cc. should be given per minute. Pernoston sodium has a pH of about 9.5 and so to allow for dilution and absorption in the blood stream, and to prevent concentration, it must be given slowly. The dosage is calculated on the basis of 1 cc. for every 27½ pounds (12½ kg.) of body weight. The patient goes to sleep immediately and there is no marked change from the normal in respiration, pulse rate, or blood pressure. The average period of effectiveness is three hours. Since the drug is rapidly eliminated the hypnotically induced sleep is of short duration but gives way to natural sleep. When the patient awakens he is refreshed. He suffers no hangover effects.

The Author

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Pernoston sodium has enjoyed wide clinical experience.

"Pernoston sodium, a Hypnotic and Amnesic Agent" was the title of a paper read before the Cincinnati Obstetrical Society in 1930. Its author, Kautz, found "that the drug was a means of producing hypnosis and amnesia without deleterious effects to mother or child; that pernoston sodium, when injected as advised, causes no depression and is quickly eliminated; that it has no narcotic effect on the baby; that it should only be used where formerly narcotics were indicated; that pernoston sodium produces a physiologic sleep; and finally, that it is not an anesthetic."

Many other papers appear concerning the use of pernoston sodium in Obstetrics, Gynecology, Surgery and Medicine, testifying as to its efficacy and safety. Space does not permit reviewing them.

St. John's Hospital in Cleveland has used pernoston sodium in its Obstetrical Department during the past 10 years. Careful inquiry of the physicians who first used and have since employed it elicits responses of enthusiasm and praise. In no instance were they able to cite a case in which harm to either mother or baby could be definitely traced to the use of the drug. The fact that pernoston sodium has been in constant use over so many years attests its safety and effectiveness. Procedure: A resident in obstetrics and an interne were in constant attendance to supervise

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Submitted July 16, 1941.

labor and administer the drug. An obstetrical history was obtained from each patient on admission and a physical examination performed. Then the nurse prepared the patient and gave a cleansing enema. The house doctors examined the patients at regular intervals to determine the progress of labor and to detect any complication that might be developing. When labor was definitely established an oral barbiturate was given and repeated to help the patient through the early stages. Pentobarbital sodium, seconal, sodium amytal and sodium allurate were employed. When a primipara was three fingers, and a multipara two fingers dilated, and pains were frequent and severe, pernoston sodium was administered. The average dose was 3 cc., the largest and smallest doses being 6.6 and 2.2 cc., respectively. The dose was determined by the weight of the patient and, more especially, by her response to the administration of the drug. If labor persisted beyond the duration of the drug's effectiveness and the patient became restless because of its rapid elimination, more pernoston sodium was given, or a capsule or two of the oral barbituate was perforated and inserted rectally. When crowning was evident the patient was taken to the delivery room and delivery was effected under gas or ether. Very little of the general anesthetic was needed. Upon completion of her delivery the patient was moved to her room on the floor. When she awakened, sometimes immediately and sometimes after a prolonged sleep, she was refreshed, and had no, or very little, memory of what had happened since the time she received the first capsules. If on admission a patient was found to be ready, or almost ready, for delivery, pernoston sodium was given immediately. If a fairly short labor was anticipated oral capsules and pernoston sodium were given together.

RESULTS

My report is based on 1500 patients, chosen at random, who received pernoston sodium. Parity was about equally divided between primiparas and multiparas—700 of the latter and 800 of the former.

In only two instances was a definite reaction noted in the mother. In the one labor was prolonged beyond the 50 hour mark. The mother had received a large dosage of the oral barbiturates and the addition of pernoston sodium produced a condition simulating shock. External heat, picrotoxin, and caffeine, intravenous glucose and saline restored the blood pressure and pulse to normal. The patient completed her dilatation, delivered her baby, which cried spontaneously, and then slept for 18 hours, at which time she awakened refreshed and without memory of what had taken place. The other patient showed a mild depression of all activities but needed no stimulation. Her baby cried spontaneously.

Vomiting during administration of the drug occurred in 5 per cent of the patients. This was never considered distressing, and a nurse was always on hand to assist. When the stomach was emptied no further vomiting or retching occurred.

Patients sometimes complained of a bitter taste while the drug was being injected. These numbered 30, or 2 per cent of the total. The sensation was very brief.

Fine tremors were sometimes visible during the time of administration of the drug. These did not persist and were thought to be due to too rapid entrance of the solution into the blood stream. Sixty patients, or 4 per cent of the total, exhibited this phenomenon.

Excitement was mild in 10 per cent of the patients and severe in 5 per cent. Close supervision by the nurses prevented these patients from harming themselves. A second dose of pernoston sodium or a perforated capsule inserted in the rectum was sufficient to quiet the majority of these patients.

With the exception of the two patients mentioned no marked change in respiration, blood pressure, or pulse was noted in any case.

Cooperation on the part of the patients was generally good, and later questioning proved that the most uncooperative ones had no recollection of their experience.

Not a single infant death could be traced to the use of pernoston sodium. Depression of the respiratory function was never marked when one took into consideration other major factors, such as parity, duration of pregnancy, length of labor, presentation, size of baby in proportion to size of mother, and operative procedures. Some babies born of primiparas had to be resuscitated while babies born of multiparas receiving nothing but pernoston sodium, and this on the delivery table, breathed spontaneously.

In our series we used pernoston sodium in every type of case and found its use advantageous. Some of the pathological conditions were: preeclampsia and eclampsia, decompensated and compensated heart disease, thyrotoxicosis, arrested tuberculosis with pneumothorax, anemia, epilepsy, tetany of the uterus during labor, Bandl's contraction ring, and so forth. We preferred not to give pernoston sodium to the premature labor group because of possible depression to the weak and underdeveloped child. Those in our series showed no definite, immediate, harmful effects.

Because pernoston sodium produces a sleep that is relatively deep and because it depresses the metabolic activities to a low ebb permitting adequate physical and mental recuperation, the delivered mothers were refreshed in mind and in body upon awakening. Excitement at this time was present in only 2 per cent of the cases. Morphine in small dosage was effective in correcting it. Whether or not pernoston sodium had much to do with it, the pernoston sodium treated patients usually required only mild analgesics to dull their after-pains and aches. Also, very few sedatives were required during the entire hospital stay.

Labor was not prolonged through the use of pernoston sodium except in the rare case, in which pains would cease entirely. Upon receiving the drug the patient would sleep peacefully for about 20 or 30 minutes. Then she would moan or change her position as uterine contractions began again. At times we thought that labor was accelerated. It may have been, for these patients were relaxed and did not fight the pains.

Amnesia was complete in from 98 to 99 per cent of the cases. The last thing remembered was "taking the capsules" or "the needle in my arm." Patients who had received pernoston sodium on previous admissions did not fear labor a second time but looked forward to "the needle" again. It was quite gratifying to see these patients within 24 hours after delivery, bright, refreshed and none the worse for having gone through the ordeal. What was most pleasing was their freedom from mental shock.

CONCLUSIONS

1. Pernoston sodium was used in 1500 labors. No definite contraindications to its use were established.

2. Pernoston sodium was found to possess a wide margin of safety. No maternal or infant deaths resulted from its use.

3. Pernoston sodium was efficient. Amnesia was produced in from 98 to 99 per cent of the cases.

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Use and Abuse of Sedatives

Because of the great number of proprietary names given to barbiturates, there is considerable confusion in their use. However, they are all strikingly alike except for the speed of their action and the duration of the effect. If we consider the barbiturates manufactured by one pharmaceutical company alone we find many derivatives starting with barbital, which is generally considered the slowest and longest acting of the group, through phenobarbital, amytal, sodium amytal, pentobarbital, pentobarbital sodium and seconal, which is the fastest and shortest acting member of the group. As in the above case, the various pharmaceutical houses manufacture different barbiturates, varying the chemical formula and thereby varying the action. Furthermore, the various proprietary names given to these drugs tend to confuse the understanding of the actions they produce. For these reasons one must familiarize himself with the action of individual derivatives and use them judiciously according to his needs. In many hospitals it is common practice to give every new patient some form of barbiturate routinely on his first night in the hospital. No doubt the increased tendency for hospital patients to fall out of bed is due to the wide use of barbiturates. The dulling of perceptions, slowing and incoordination of muscular responses, impairment of the higher intellectual functions and sense of equilibrium which sometimes follow a dose of barbiturate are an even more important consideration in ambulatory patients. Driving an automobile, for example, while under the influence of a barbiturate, may involve the patient in a serious accident through his falling asleep at the wheel or his inability to summon his highest faculties in a traffic emergency. Another risk, which is fortunately infrequent, is that of unexpected reactions arising from an idiosyncracy. This usually takes the form of an erythematous rash accompanied by fever which may persist for a week or more despite eliminative therapy. However, if one understands that these drugs cannot be given without mental reservation on the part of the physician, that they are not without dangers even in small doses, and that intoxication and psychosis may result from prolonged or excessive use, they still have a definite value. In addition to the effect of allaying cerebral activity or excitement, the barbiturates have special uses, and also may give rise to some special types of abuses.

Sodium amytal often is useful as a substitute for tube feeding in those patients who persistently refuse food. In such cases, sodium amytal in water is given instead of the usual tube feeding and shortly afterward the patient is offered food, first by spoon feeding by the nurse-attendant. By this means the inhibition of the act of eating, arising from the patient's psychosis, may be suppressed, temporarily of course, but sufficiently to enable a re-initiation of normal eating habits. Following this procedure, the patient may continue to accept spoon feeding, thereby eliminating the dangers of tube feeding, or he may even resume voluntary eating, feeding himself. If this occurs the sodium amytal may be given orally for a period of time and later discontinued when the patient becomes reëstablished in his natural manner of eating.

Another use for barbiturates in certain forms of mental illness is for the purpose of introducing prolonged narcosis. Various barbituric acid derivatives have been used for this purpose; however, our experience has been primarily with sodium amytal. Other sedative agents such as bromides and trional have been used to induce somnolent states in an effort to dislodge psychotic conditions.—Charles F. Obermann, M.D., Cherokee; Jour. Iowa S.M.S., Vol. XXXI, No. 10, October, 1941.

Laryngeal Carcinoma

J. W. McCALL, M.D. AND A. J. LAMB M.D.

IN the past five years, 1935 to 1940, nineteen proven cases of carcinoma of the larynx (biopsy), have been admitted to the Otolaryngological service of St. Luke's Hospital. There were four other presumable cases treated in the X-ray department, but as they were not proven by biopsy, they are not included in this report.

"The accurate study of laryngeal carcinoma has been possible only since the invention of the laryngoscope by Manuel Garcia in 1855". Prior to this time various attempts at surgery had been made but they were ill-planned and executed. The first properly reported laryngo-fissure was by Gordon Buck in 1855. The patient died 10 months later with recurrences.

The earlier workers in this field failed to recognize the disease in the incipient stage and consequently all cases that were operated, were far advanced. As a result not until 1876 after 12 layngectomies were reported, was a successful cure obtained. From 1876 to 1886, 108 cases were operated with only 21 cures and from 1886 to 1901, 186 were operated with 69 cures.

THE FIRST LARYNGECTOMY

The first total laryngectomy was in 1866 by Watson but this was not for cancer but for lues! The first total for carcinoma was by Billroth also in 1873. The patient survived the operation but died with recurrence eight months later. By 1907 about 500 cases had been reported but there still was a high percentage of recurrence and mortality.

MacKenty, in reporting his experiences, tells of very discouraging results with both thyrotomies and laryngo-fissures. Prior to 1917, he performed 13 total laryngectomies with two surgical deaths and six arrests. Then he began to preach earlier diagnosis and from 1917 to 1922 performed 31 laryngectomies with five recurrences, 24 traced and found to be arrested and two untraced. Later he had 58 totals with only five recurrences and all these were operated in the later stages.

Of the 19 proven cases of carcinoma of the Otolaryngological service of St. Luke's Hospital, five were intrinsic and 14 were extrinsic, showing the great need of the early recognition of these cases. Of these 19 patients, 10 are now alive, and nine are dead.

Sixteen curative operations were done on the 19 proven cases of carcinoma of the larynx. There was one laryngo-fissure and 15 laryngectomies. The necessity of a total laryngectomy in the great preponderance of cases shows the necessity for education of the profession and laity in earlier recognition of carcinoma of the larynx, for if the carcinoma is recognized early enough, it may suffice to do a laryngo-fissure and preserve the normal air passage. The laryngo-fissure is not as formidable a procedure as a total laryngectomy, and usually the patient retains a good speaking voice. However, a total laryngectomy is not as formidable or crippling in operation as is commonly supposed.

Early or intrinsic carcinoma of the larynx has one and only one symptom, hoarseness. When pain or difficulty in breathing or swallowing manifest themselves, the growth is then outside the larynx and the outlook for the patient is grave indeed, if not hopeless.

The frequently applied label of chronic laryngitis to these cases of carcinoma of the larynx has been the cause of much suffering and many deaths. Nowhere in the body does carcinoma yield so splendidly to surgical treatment as in the larynx if it is intrinsic.

First, when you consider that more than 80 per cent of patients with early vocal cord cancer can be cured by surgical treatment,[2] early cancer of the vocal cord is confined in a cartilaginous box, the thyroid cartilage, which protects the surrounding soft tissue from early invasion. Second, the lymphatic drainage from the vocal cords is very limited. Third, carcinoma of the larynx does not show the usual tendency to early metastasis to other regions of the body.

When a patient presents himself with a history of hoarseness of over two weeks duration above the age of 40, he should be suspected of having a carcinoma of the larynx. Hoarseness is present in every case of cord cancer, pain often regarded as a common symptom never is observed in early vocal cord cancer. Any patient

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From the Otolaryngological Department, St. Luke's Hospital, Dr. Carlos E. Pitkin and Dr. W. H. Tuckerman, Directors. Submitted July 24, 1941.

TABLE I

Name	Age	Symptoms	Path. Report	Operation	Result
C.L. Male	42	Hoarseness two years	Well differentiated Ca. involving rt. true & false cord. Partial fixation rt. cord. Intrinsic	Tracheotomy 2-3-36 Laryngo-fissure 2-14-36 Total Laryngectomy 3-2-36	Alive, well, working and talking
J.B. Male	52	Hoarseness three months with dyspnea	Ca. poorly differentiated involving entire larynx	Refused operation Emergency tracheotomy 6-26-36	Dead
F.B. Male	49	Hoarseness 2½ years. Later dyspnea and dysphagia	Ca. poorly differentiated primarily of rt. vocal cord	Laryngo-fissure and X-ray at Philadelphia Jan. 1938	Dead 7-29-39
A.E. Male	56	Hoarseness increasing several years	Anterior two-thirds rt. cord involving commissure and left cord. Poorly differentiated Ca. Intrinsic	Total laryngectomy 3-24-38	Alive, well, not talking
D.M. Male	63	Hoarseness one year	Left cord, left arytenoid, anterior commissure and one-third rt. cord. Well differentiated Ca. Extrinsic	Total Laryngectomy 4-18-38	Dead 3-26-39
B.C. Male	51	Hoarseness six months	Early Ca. rt. cord. Extensive leucoplakia both cords. Intrinsic	Total Laryngectomy 7-28-38	Alive, well, working, talking
W.J. Male	55	Hoarseness cough one year. Dyspnea three weeks	Fungating mass entire rt. side of larynx. Well differentiated Ca. Extrinsic	Total Laryngectomy 8-5-38	Dead 9-5-39
E.O. Male	59	Hoarseness six weeks. Non-productive cough	Ca. involving anterior one-third rt. cord. Commissure and left cord. Intrinsic	Total Laryngectomy 4-18-39	Alive, well, talking
G.P. Male	53	Hoarseness six months	Large fungating mass involving left side larynx with marked glandular metasteses. Extrinsic	Tracheotomy 5-24-39 Total Laryngectomy 6-9-39	Dead 1-20-40
M.T. Female	71		Ca. grade 4. Fungating mass involving posterior portion entire larynx	Emergency tracheotomy 6-28-39	Dead
C.C. Male	45	Hoarseness nine months	Ulcerating poorly differentiated Ca. with Mastastesis & peri-laryngeal abscess. Extrinsic	Total Laryngectomy 3-13-40	Alive, no voice. Recurrence
S.V. Male	55	Slight pain one year. Pain on swallowing two months	Ca. grade 2. Involving primarily base of epiglottis extending into larynx. Extrinsic	Total Laryngectomy and removal entire epiglottis 6-5-40	Alive, well, working, talking
C.H. Male	64	Hoarseness increasing past three years	Ca. grade 2. Involving left vocal cord, commissure one-half rt. cord, both ventricles. Intrinsic	Total Laryngectomy 6-22-40	Alive, well, working, talking
J.R. Male	45	Hoarseness two years. Cough six months. Refused operation 10 months prior. Had X-ray	Ca. grade 3. Rt. true and false cord with subglottic extension. Extrinsic	Total Laryngectomy 7-27-40	Dead 11-29-40
V.K. Male	53	Hoarseness and dysphagia three months	Ca. grade 2. Funagating ulceration mass involving rt. cord, extension to epiglottis. Extrinsic	Total Laryngectomy 7-30-40	Dead 2-30-41
R.G. Male	40	Hoarseness two months	Well differentiated Ca. rt. cord, commissure anterior portion left cord. Intrinsic	Total Laryngectomy 11-20-40	Alive, well, working, talking
B.G. Male	67	Hoarseness seven months. Dyspnea two weeks. Refused operation four months previously	Ca. involving both true and false cord. Peri-laryngeal extension. Erosion thyroid cartilage with abscess formation. Extrinsic	Total Laryngectomy 11-23-40	Alive. No recurrence. Not talking
C.R.	63	Hoarseness four months	Ca. grade 1. Posterior two-thirds rt. cord. Aryntenoid fixation rt. cord. Extrinsic	Total Laryngectomy 12-30-40	Alive, well, talking
G.C. Male	68	Hoarseness. Dyspnea two months. Dysphagia one month	Poorly differentiated Ca. left periform sinus. Ary-epiglottic fold and epiglottis	Refused operation	Dead

with a suspected carcinoma of the larynx should be kept under constant observation.

An immediate and careful inspection of the larynx by indirect or if necessary direct observation with a laryngoscope should be done, and a biopsy taken of the suspected tissue and a careful microscopic examination made of all tissue removed at biopsy. One negative biopsy finding does not necessarily rule out the possibility of the growth not being malignant. In one of the cases included in this report, it was necessary to take three biopsies before a positive diagnosis of carcinoma was made.

In another case included in this report, a clinical diagnosis of carcinoma of the larynx was made by a competent laryngologist. Unfortunately, the biopsy did not show the growth. The patient was assured that he was all right since the biopsy was negative. He went to Florida. After a length of time (three months), he returned. He was examined by another laryngologist and at this time the growth showed involvement of the cervical glands. The man has since died of a recurrence after a total laryngectomy.

About 90 per cent of vocal cord cancers are of squamous cell type and do not metastasize early. Approximately 80 per cent of cancer of the larynx begins in the vocal cord in its anterior one-half. Syphilis or tuberculosis may occur coincidentally with cancer. A prompt biopsy in every laryngeal case in spite of a positive Wasserman is a first rule to follow. Too often these cases are given a prolonged course of antileutic treatment to find later that the lesion is cancer and probably has become inoperable.[1]

If a diagnosis of carcinoma of the larynx is made early enough and the growth does not involve the anterior commissure, it may be sufficient to do a laryngofissure, and preserve the normal air passage.

Where the growth has become deeply imbedded in the tissue or involves the anterior commissure, we believe a total laryngectomy offers a better chance of permanent cure for the patient. It has been a studied policy of the Otolaryngological staff of St. Luke's Hospital not to compromise with cancer of the larynx, and where there is a question whether the laryngofissure might not suffice, we have done a total laryngectomy.

There have been 15 total laryngectomies, one laryngofissure with no operative mortality.

With proper instruction and insistence on the part of the surgeon, these patients can develop an esophageal speech. Anyone who can learn to voluntarily force a current of air from the esophagus, can learn to speak without a larynx. The insistence that patients make an early effort to speak and by encouragement and the uses of various carbonated drinks, they soon get the knack of forcing a current of air up from the esophagus. Most of our speaking is done with our lips and tongue, and as soon as these patients learn to force a current of air from the esophagus and the mouth, they are well on the way to the development of a speaking voice.

SUMMARY

A report of the experiences of the Otolaryngological service at St. Luke's Hospital, with cancer of the larynx, for the past five years, has been given.

In 16 operative cases, one laryngofissure, and 15 total laryngectomies, we have had no operative mortality. Of these 16, six were intrinsic, and are living and well. Ten were extrinsic, six are dead and four living and apparently well.

A plea is made for the earlier recognition of the disease by both the medical profession and laity alike.

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Erythremia

That the cause of erythremia is still obscure is evidenced by the numerous theories. In 1923, Minot and Buckman expressed the opinion that the origin of this disease is a malignant neoplasm of the hemopoietic tissue comparable to that seen in association with chronic myelogenous leukemia. Schulhof and Matthies based experimental work on the clinical observation that polycythemia may accompany epidemic encephalitis and demonstrated on rabbits that lesions produced in the proximad vegetative centers were followed by increases in the red cell counts. This subject of cerebral conditions accounting for polycythemia was later well discussed by Moehlig and Bates, who also reviewed the literature dealing with the influence of the pituitary gland on the formation of erythrocytes. They contributed clinical observations and experimental data to support the embryohormonic theory of the relation between the pituitary gland and mesodermal (erythropoietic) tissue. Morris and Hitzenberger have suggested that polycythemia may be due to hypersecretion of the X factor of Castle. Major, however, was unable to confirm Morris' contention that giving the intrinsic factor to patients with erythremia produces a reticulocytic response. The theory that cholesterol is an antihemolytic principle and that hypercholesteremia might therefore prolong the life of the red cells and produce polycythemia was investigated by Boyd, who found no relation between the neutral fat or any cholesterol fraction of the plasma and the red cell level.

In reviewing the possible causes of polycythemia vera, the factor of inheritance must be recognized. Spodara and Forkner in 1933 reported an instance in which polycythemia with splenomegaly was a familial trait and cited six others in the literature. Nadler and Cohn in 1939 described four cases of erythremia in a family of eleven.

A significant contribution to the solution of this etiologic problem has been made by Reznikoff and Foot, who have demonstrated in the bone marrow of patients with erythremia a subintimal and adventitial fibrosis of the arteries and arterioles along with a thickening of the capillary walls. They submitted the idea that impaired local circulation of the marrow produces an anoxemia which initiates the overproduction of red cells. In a lecture last year, Rezinkoff stated that "all workers agree that the increase of erythrocytes is due not to decreased destruction or prolonged longevity of the red blood cells but primarily to heightened production."—Arthur Andrews Holbrook, M.D., Milwaukee; Wisc. Med. Jour., Vol. 40, No. 10, October, 1941.

Spontaneous Interstitial Emphysema of the Lungs

A Report of Two Cases and Summary of the Literature

ISADOR MILLER, M.D.

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In February, 1933, Louis Hamman[1] examined a 51-year-old Washington physician who had presumably suffered a myocardial infarction. None of the constitutional symptoms and signs of this condition was present, but there was heard a peculiar crunching noise over the apex of the heart. The course of events in this patient convinced Hamman that coronary occlusion had not occurred, but the cause of the severe chest pain and the extraordinary sound heard over the heart remained a puzzle. Four months later Hamman saw a boy with subcutaneous emphysema in the neck and emphysema of the mediastinal tissues. The same peculiar sounds were heard over the heart of this boy. Hamman was then able to explain the puzzling sound heard over the heart of the Washington physician, and he made the diagnosis "spontaneous interstitial emphysema of the lungs".

In 1937 Hamman[2] presented four more cases and discussed the pathogenesis of this disease. A survey of the literature revealed eight more cases. Lister[2] in 1928 and Wolferth and Wood[4] in 1930 each presented a case which was undoubtedly spontaneous interstitial emphysema of the lungs, and these two cases are included in the eight. During the past year at the Cincinnati General Hospital two more patients with this disease were seen. Table 1 summarizes the 14 reported cases and the two presented here.

CASE REPORTS

Case 1.*—The patient is a 27-year-old white male, married, and a resident on the Cincinnati General Hospital staff. On January 18, 1940, while walking to the wards, the patient was suddenly seized with an excruciating, knife-like, rending pain over the left upper back between the scapula and the spine. He became dizzy, weak, began to sweat, and had a sensation of impending disaster. He was obliged to lean against a wall for support. His first thought was that the pain was due to aortic dissection. After three or four minutes the sharp pain disappeared, and the patient was able to walk to the ward. His chest was examined at this time and the only findings were decreased breath and voice sounds over the left upper chest. He continued to have a dull aching pain over the left scapular area. The next morning the patient noted a similar dull pain over the lower end of the sternum. He consulted Dr. N. Shapiro because of this pain. Physical examination revealed temperature 98.4, pulse 80, respirations 22, and blood pressure in millimeters of mercury 125 systolic and 75 diastolic. The patient did not appear ill and no abnormal physical findings were present except "a short friction rub in the third left interspace in the parasternal line". A teleorontgenogram on this day (January 19, 1940) revealed a small amount of air in the left pleural space.

The patient went to bed, and he was comfortable except for some dull pain over the lower part of the sternum and over the left scapular area. On the morning of January 20, 1940, while resting quietly in bed, the patient developed sharp stabbing pains over the left precordium. Soon after this he heard peculiar loud clicking noises in his chest synchronous with the heartbeat. Palpation by the patient over the sternum revealed a thrill was present. The patient's wife who was standing five or six feet away from the bed was also able to hear these sounds. The patient did not become dyspneic, orthopneic, dizzy, or cyanotic.

He discovered that a deep inspiration decreased the pain and the noises and a deep expiration accentuated them. He could also decrease the pain and sounds by rolling to the right side. On rolling to the left side the sounds became very loud and the pain became agonizing. This pain radiated to the left shoulder and down the left arm along the course of the ulnar nerve. On returning to the right side the pain decreased in severity and a sensation of numbness was present in the fourth and fifth fingers of the left hand. Examination of the patient soon after the onset of the chest pain and noise revealed no cough, dyspnea, cyanosis, alteration of pulse, respiration, or blood pressure. General physical examination was negative except for the chest. Cardiac dullness was completely obliterated. Over the precordium could be heard loud clicking crunching noises synchronous with the heartbeat. The signs of a pneumothorax on the left were present. There was no subcutaneous emphysema.

The diagnosis of spontaneous interstitial emphysema of the lungs was made, and no therapy other than bed rest was instituted. At the end of three days the chest pains had disappeared, but only after a week were the signs of pneumomediastinum gone. At the end of 10 days the pneumothorax was also gone. A teleoroentgenogram on January 31, 1940, 12 days after the onset of this illness, showed no pneu-

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* Data kindly furnished by Dr. N. Shapiro and the patient, Dr. H. Lederer.

From the Personnel Office, Cincinnati General Hospital, College of Medicine, University of Cincinnati, Cincinnati, Ohio.

Submitted June 13, 1941.

TABLE 1

Summary of Sixteen Cases of Spontaneous Interstitial Emphysema of the Lungs

Case No.	Author	Year	Sex	Color	Age in Years	Onset	Chest Pain	Intrathoracic Sound Heard by Patient	Roentgen Ray	Duration
1	Hamman (1)	1934	M	W	51	Shaving	Severe precordial	Synchronous with heartbeat	Normal	Several days
2	Hamman (1)	1934	M	W	17	Sitting in chair	Severe in neck and chest	——	——	Fever 1 day
3	Hamman (2)	1937	M	W	25	—	Sharp on left side of chest	Synchronous with heartbeat	Normal	8 days
4	Hamman (2)	1937	M	W	35	Getting out of a car	Severe in left chest	Over precordium	Early infiltration at apices. Small left pneumothorax	3 days
5	Hamman (2)	1937	M	W	29	Walking in street on cold day	Severe in left chest	——	Small left pneumothorax	Few days
6	Hamman (2)	1937	M	W	16	In bed	Severe in right lower chest	——	Air in mediastinum between anterior chest wall and heart	Few days
7	Lister (3)	1928	M	W	31	Sitting in a train	Severe in upper chest	Synchronous with heartbeat	Large left pneumothorax	3 weeks
8	Wolfert and Wood (4)	1930	M	W	21	While wrestling	Severe pain on exertion	Synchronous with heartbeat	Small left pneumothorax	2 days
9	McGuire and Bean (5)	1939	F	W	17	Standing dribbling a basketball	Moderate in left anterior chest	In region of heart	Air in mediastinum. Small left pneumothorax	6 days
10	McGuire and Bean (5)	1939	F	W	39	In bed 15 min. after delivery	Very severe in left lower chest	No	Normal	5 days
11	Wolff (6)	1940	M	W	27	Rolling an empty wheelbarrow	Severe in left chest	Grinding, crunching synchronous with heartbeat	Air in mediastinum. Small left pneumothorax	1 day
12	Scott (7)	1937	M	W	16	At end of ½-mile foot race	Severe retrosternal. Radiation down both arms	——	Air in mediastinum	Several days
13	Scott (7)	1937	M	W	20	At end of 100-mile bicycle race	Severe in region of sternum	——	Air in mediastinum	Few days
14	Morey and Sosman (8)	1939	M	W	—	Working with Haldane apparatus	Severe in left upper precordium. Radiation to left shoulder	Knocking and clicking	Air in mediastinum. Left pneumothorax	7 days
15	Author	1941	M	W	27	Walking	Severe precordial. Radiation to left shoulder and arm	Clicking and crunching synchronous with heartbeat	Left pneumothorax	3 days
16	Author	1941	M	W	23	Walking	Severe precordial. Radiation to left shoulder and arm	No	Air in mediastinum. Left pneumothorax	8 days

mothorax on the left and normal lung fields. No mediastinal air was present. The patient returned to work 17 days after the onset of his disease, and there has been no recurrence to date.

Case 2.—H. B. S. is a 23-year-old white male, married, and graduate student in chemistry.

On March 13, 1941, while walking for a street car he noted the onset of a dull pain over the left costal margin in the midclavicular line. On the street car this pain disappeared, but after alighting and walking half a block, he was seized with a severe pain over the left precordium which radiated to the left shoulder and into the left upper arm over the deltoid region. The pain was sharp and he was forced to stop walking. He felt weak and entered a drugstore to sit down. At the end of 15 minutes his pain decreased to a dull ache. He got up and walked another half block and there was a recurrence of the severe pain. Again he was obliged to rest and the pain soon decreased in intensity. After this second attack the patient was able to finish his shopping and returned home. His only discomfort was a dull pain over the left costal margin and over the lower end of the sternum. The following day the patient still had the chest discomfort. Inspiration made the pain sharper and bending the trunk toward the right produced a sensation "of gas bubbles crunching in my chest". There was no dyspnea, cyanosis, cough, nausea, vomiting, abdominal distention, or peripheral edema. The patient was admitted to the General Hospital on March 15, 1941.

Physical examination revealed the temperature 97.6°, pulse 80, respirations 20, and the blood pressure 110 millimeters of mercury systolic and 55 millimeters of mercury diastolic. The patient was comfortable and did not appear ill. The abnormal physical findings were limited to the thorax. The area of cardiac dullness was obliterated by a hyperresonant percussion note. The heart sounds were of normal quality and intensity and the rhythm was normal. Over the pulmonic area and along the left border of the sternum there was heard a peculiar crunching sound synchronous with the heartbeat. Alteration of respiration did not influence the sound. On turning the patient to his left side the sound became loud and the patient complained of sharp pain over the precordium and left shoulder. Breath sounds and voice sounds were suppressed over the left upper chest. Subcutaneous emphysema was not present.

A white cell count was 8500 per cmm. of blood. The urine was normal. An electrocardiogram was normal. A teleoroentgenogram was interpreted as follows: "There is a fairly large area of pneumothorax over the upper third of the left lung so that the upper lobe is collapsed to about half its normal size. Definite pneumothorax is not seen in the lower half of the lung field. Along the left lateral border of the heart, at the level of the pulmonary conus and the lower portion of the aortic knob, there is a line of decreased density one-half centimeter in width which suggests some mediastinal air" (Dr. M. Steucheli).

The diagnosis of spontaneous interstitial emphysema of the lungs was made and no therapy other than bed rest was instituted. A teleoroentgenogram two days later revealed no change in the size of the pneumothorax. No air was seen in the soft tissues of the neck and air was present along the left border of the heart. On the sixth hospital day while reaching to the right with the left arm, the patient precipitated an attack of severe precordial pain which radiated to the left shoulder and down the left arm. This pain lasted one hour and the patient stated that he was able to palpate a thrill over his sternum that was synchronous with the crunching he could feel in his chest. Eight days after admission all chest discomfort was gone. By the tenth day the signs of pneumomediastinum were no longer present. A teleoroentgenogram on the tenth day, and fluoroscopic examination on the thirteenth day, revealed progressive decrease in the size of the pneumothorax. Twenty days after the onset of this illness the patient returned to his work at school.

DISCUSSION

The occurrence of interstitial emphysema of the lungs and mediastinal emphysema associated with disease or trauma is not new. Laennec[9] gave the first accurate description of the pathologic anatomy. The literature contains many reports of this condition occurring after trauma to the chest, by overdistention of the lungs with violent effort, in children after severe paroxysms of coughing or crying, after straining at stool, during childbirth, and after heavy lifting. It was descrbed in cases of influenza during the pandemic of 1918-19.[10,11] Dolgopol and Stern[12] reported a case in a child with laryngo-tracheobronchial diphtheria. Interstitial emphysema has been produced by accidental laceration of the lung during chest aspiration.[5]

Hamman[1'] is of the opinion that pulmonary alveoli of healthy persons may rupture spontaneously and permit the escape of air into the surrounding connective tissue. This air travels along fascial planes toward the mediastinum or toward the visceral pleura.

Macklin[13] has ruptured the lungs of cats by forceful distention and has demonstrated air passing along the sheaths of arteries toward the mediastinum. Dolgopol and Stern[12] reported the case of a child with diphtheria of the larynx, trachea, and bronchi, who developed interstitial emphysema and spontaneous pneumothorax. The sections of the lungs revealed air bubbles in the septal lymphatics but not in the perivascular sheaths. So far as these authors could find, this is the first case on record in which interstitial emphysema of the human lungs has been demonstrated histologically in cases of spontaneous pneumothorax.

After the air reaches the hilum, it spreads out in the mediastinum, collects in bubbles about the blood vessels, and infiltrates the tissues that lie between the heart and the anterior chest wall. The distention of the mediastinal tissues produces pain which may closely simulate that of angina pectoris. This air may remain trapped and gradually be absorbed, or it may pass along fascial planes and appear above the clavicles, spreading up the neck and over the front of the chest in the subcutaneous tissues.

Pneumothorax is often present in this condition. It may occur in several ways. Air in the pulmonary interstitial tissue may travel toward the visceral pleura and collect as a subpleural bleb. When the bleb ruptures pneumothorax is produced. This method is suggested by the report of Dolgopol and Stern.[12] On the other hand Hamman[1'] suggested that air escapes into the pleural cavity from the mediastinum. He believed this to be the mechanism in many cases of spontaneous pneumothorax. Machlin[13] has been able to demonstrate the point of rupture through the mediastinal wall in some cats.

Spontaneous interstitial emphysema of the lungs may occur without the least effort, when the patient is quietly standing, sitting, or lying down. When the air reaches the mediastinum and distends the tissues severe pain is produced which is usually precordial, but may radiate to the back, or to the left shoulder or left arm. Constitutional symptoms or evidence of shock are absent. There is little disturbance of temperature, pulse, respiration, blood pressure, and white cell count. The pathognomonic finding of mediastinal emphysema is the peculiar sound heard over the heart with each contraction due, no doubt, to compression of the air-filled mediastinal tissues which lie between the heart and the anterior chest wall. Many adjectives have been used to describe this sound, for instance, crunching, bubbling, crepitant, crackling, clicking, and popping. Hamman[14] says this sound is different from any other heard over the heart, and when once heard, the nature of the sound could never again be confused. The area of cardiac dullness is diminished or obliterated by a hyperresonant percussion note. Pneumothorax often occurs. It is usually small and may not be recognized until a roentgenogram of the heart is taken. In these 16 cases pneumothorax occurred nine times and only on the left side. The roentgenogram is a valuable aid in establishing the diagnosis by demonstrating the presence of air in the mediastinum. The appearance of subcutaneous emphysema in the tissues of the neck at once assures the diagnosis. This occurred only in five of the 16 cases. All the patients recovered and recurrence is known to have occurred in two patients.

Often the peculiar chest sound is not very loud or may be heard only with the patient lying on the left side. If this is overlooked myocardial infarction may be mistakenly diagnosed. Again, the sound may be misinterpreted and be attributed to pericarditis. Other conditions which may be simulated by the pain are dissecting aortic aneurysm, pulmonary embolism, and perforated ulcer, oesophageal or peptic.

CONCLUSIONS

1. The 14 reported cases of spontaneous interstitial emphysema of the lungs are summarized.
2. Two more cases are presented.
3. The symptoms, signs, and pathogenesis of this disease are discussed.
4. In the differential diagnosis of acute chest pain, spontaneous interstitial emphysema of the lungs should be considered.

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Management of Constipation

Constipation is not a disease but a symptom. After excluding those cases in which it is due to organic disease, one is left with a large group of persons in whom constipation is the result of a functional disturbance of the gastrointestinal tract and, usually, of the colon in particular. The reflexes that coordinate the motor activities of the various parts of the gut may be altered or interfered with in a multitude of ways, especially by emotional and psychic factors, by changes in the environment, by changes in the habit of bowel evacuation, and by the use of constipating drugs such as morphine, codeine, and hypnotics. It is noteworthy that the intestinal motor pattern in psychiatric patients has been shown to be directly related to the type of mood disturbance. Another cause of constipation which should not be overlooked is the daily use of enemas or strong cathartics; the premature emptying of the bowel by this means prevents the accumulation of feces in the colon which provides the normal stimulus for defecation. Another etiologic factor may be a specific deficiency, as for instance, a deficiency of the thyroid hormone or of certain minerals or vitamins.

The successful management of the functional disturbance known as "chronic constipation" involves a detailed study of the patient's psychosomatic reactions and of his habits and daily routine. The various factors that may be important in the etiology of the condition should be regulated. These include the bulk of the diet, fluid intake, exercise, rest and relaxation, and bowel habits. Bulk-producing agents that yield a smooth residue, in particular granular agar and certain vegetables high in cellulose, are often useful. In cases in which the cause of the trouble is located in the rectum or anal sphincter, enemas of tap water or oil may be indicated. The judicious use of cathartic drugs may be resorted to in some cases, especially in elderly and bedridden patients; the milder agents that induce formed stools are to be preferred, such as cascara, senna, sodium phosphate, and small doses of milk of magnesia. Cascara and senna have a selective action, in that increased motility of the gut is not observed until the drug has reached the large intestine. Liquid petrolatum is often effective, but it has disadvantages in that it may leak from the rectum and may cause a loss of fat-soluble vitamins; it is also to some extent absorbed and deposited in the liver. It may be rendered more miscible with the organic matter of the stool by emulsification. The cathartics used in the treatment of chronic constipation probably act by increasing the bulk of the stool, by altering its consistency, or by local irritation of the intestine. —Janet Travell, M.D., New York City, N.Y.S. Jour. of Med., Vol. 41, No. 19, October 1, 1941.

‘Trigeminal Neuralgia’ as a Complication of the Prophylactic Use of Tetanus Antitoxin

A Case Report

MILTON ROSENBAUM, M.D.

THE neurologic complications following the prophylactic and therapeutic use of tetanus antitoxin are well known. Although the literature contains a number of articles on this subject, a neurological complication is rather uncommon when one considers the great number of patients who have received injections without such developments. By far the most common neurologic complication is a brachial plexus palsy and most of the reported cases are of this type.[1,2,3]

Doyle, in a review of the literature, reported a total of 49 cases with neurologic complications after injection of serum.[2] Among these were six cases of optic neuritis, eight mononeuritis, one case with involvement of the brain and meninges, and one patient who developed a myelitis. A mild lymphocytic reaction in the cerebrospinal fluid was associated with three of these cases. Young, who also reviewed the literature, cited a case of isolated facial nerve palsy.[3] A patient was seen recently who presented symptoms of a “trigeminal neuralgia” following a prophylactic injection of tetanus antitoxin. Since no reference to a similar instance was found in the literature, a report of this case was considered worthwhile.

CASE REPORT

H.D., a white male aged 57, was seen in consultation with Dr. Sam Harris, of Forestville, Ohio, on December 22, 1940. He complained of two attacks of severe pain in the left face, each lasting about two hours.

History: The patient, who was employed as a foreman in a tool and die making plant, was in perfect health up until the afternoon of November 12, 1940, at which time he suffered a cut on his left forearm. The wound was immediately treated by the plant physician and following this a hypodermic injection of tetanus antitoxin was given into the deltoid region of the left arm. The patient stated that he “argued against the injection” because of a reaction to a similar injection 15 years previously. Despite his protestations the injection was given. The following day the left upper arm became swollen and painful, to subside gradually in about two weeks. About two days after the injection the patient developed a headache and a severe pain in the nape of the neck. The headache and neck pain lasted for three weeks, were quite severe, although the patient continued to work and was apparently afebrile.

On December 10, 1940, a few days after the headache and neck pain had subsided, and four weeks after the injection, the patient was suddenly seized with a terrific attack of pain in the left side of his face. The pains were “shooting” and severe, started at the angle of the jaw and involved the entire side of the left face. The patient stated that he had never experienced “such severe pain in his whole life”, and remained in agony until the attack subsided after one hour. The patient remained free from attacks until 10 days later, December 20, 1940, at which time he was suddenly seized with a similar one. Dr. Harris was called and because of the severity of the pain, administered one-fourth of a grain of morphine sulphate by hypodermic injection. After an hour no relief followed and another one-fourth of a grain of morphine was given. The attack subsided abruptly after another hour. A third similar attack, lasting two hours, unrelieved by morphine, occurred on December 26, 1940. The patient had his fourth and last attack on December 28, 1940. He inhaled trichlorethylene during this attack, without relief.

The past history was completely negative except for a reaction to an intra-abdominal injection of tetanus antitoxin 15 years previously. A few days after this injection he developed large urticarial wheals around the site of the injection and for about six months the anterior surface of the abdominal wall remained painful and tender. He was unable to wear a belt or fasten the upper buttons of his trousers during that six months period.

The physical examination revealed a very well developed and well nourished white male in excellent physical condition. No positive physical findings were noted. The blood pressure was 130/70 and there was no evidence of arteriosclerosis. The neurological examination was entirely negative. No “trigger points” were found in the left side of the face. The laboratory findings were limited to an examination of the blood and

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Submitted August 5, 1941.

urine, both of which revealed no abnormalities. A lumbar puncture was not performed.

Course: Up until the time of this writing (ten months after the last attack) the patient has remained free of attacks and in perfect health.

COMMENT

It is always a bit hazardous to draw definite conclusions about the etiology of an illness because of a close temporal relationship of an event or series of events preceding the onset of the said illness. Yet in the case described, the temporal relationships are so striking as to be considered causal. When the author first saw this patient, he was very much impressed by the relationship of the injection to the presenting complaint so as to strongly consider the symptom as a complication of the injection. At the same time, there was the possibility, especially when considering the patient's age (58), that the two events were only coincidental, and that the patient was having attacks of "idiopathic trigeminal neuralgia". However, the course and the atypical symtomatology of the illness did not support the latter possibility. Also, the headache and neck pain which followed the injection strongly suggested a meningitic reaction, which type of reaction has been reported as a complication of tetanus antitoxin.[2,3] Unfortunately, an examination of the cerebrospinal fluid was not done. The close association between the "attacks" and the "meningitic" reaction suggested irritation of the roots of the second and third division of the left fifth cranial nerve in the region of the base of the brain.

CONCLUSION

A case is reported in which attacks of "trigeminal neuralgia" involving the second and third division of the left trigeminal nerve appeared as a complication of the prophylactic injection of tetanus antitoxin.

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It is a melancholy thought that 100,000 persons in this country each year find life so unbearable that they attempt escape by suicide. Although psychiatry as a science has made notable advances in the past two decades and the number of physicians devoting their entire attention to mental disturbances has increased greatly, these figures indicate how many gaps there are in our knowledge and how inadequate has been our response to the challenge of personality disorders. —J. J. Westra, M.D., Muncie; Jour. Ind. S.M.A., Vol. 34, No. 10, October, 1941.

Acute Amebic Dysentery—General Discussion

In 1932 Craig estimated that at least 1,200,000 persons harbored Endamoeba histolytica in the United States. Fortunately this does not signify that all have ulcerative colitis or liver abscesses which are the most distinctive lesions of the condition. Probably this is due to a natural immunity to the disease or to other unknown factors. However, the parasite does produce lesions in an unknown percentage of those infected. Furthermore, the large number of persons who harbor the parasites, represent a definite menace to the public health. It may be judged from the experience obtained in the Chicago outbreak that this menace can be largely controlled by adequate protection of water and food supplies and by sanitary sewage disposal. Even with the best of sanitation, sporadic cases will continue to occur because of the large number of infected persons each of whom may at any time transfer it to another individual who is susceptible to the disease.

While dysentery usually results from infection with the ameba, this may vary in intensity and at times is lacking. In acute amebic dysentery, the onset is sudden with severe pain over the abdomen. They may be accompanied by nausea and vomiting and a diagnosis of acute appendicitis may be made. The diarrhea is serious and the patient may have fifteen to thirty-five bowel movements a day. The stools are fluid and contain mucus, blood and at times shreds of mucous membrane. The diarrhea may be accompanied by slight fever and the patient becomes extremely weak and depressed. After a few days or a week, the diarrhea becomes less severe and gradually subsides only to be followed by intermittent attacks from time to time. If the condition becomes chronic there are repeated attacks of colic and diarrhea with loss of appetite, and the stools show blood and mucus. Often these result in chronic invalidism with loss of weight and strength.

While the patient usually consults a physician for acute, intermittent or chronic diarrhea, in some instances constipation or vague abdominal distress and loss of weight may be the chief complaints. In such cases the etiology may be detected only upon repeated examinations of the stools with particular emphasis upon the search for the parasites. In some cases the condition may be overlooked because the physician does not suspect the possibility. It is well to remember that amebic dysentery has often been confused with bacillary dysentery, mucous colitis, ulcerative colitis, appendicitis, typhoid fever and malignancy of the colon.—F. P. McNamara, M.D., Dubuque, Iowa, and William C. Schiele, M.D., Galena, Ill.; Jour. Iowa S.M.S., Vol. XXXI, No. 10, October, 1941.

A Discussion of Orthoptic Training

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THE word orthoptic is derived from the roots of two Greek words meaning straight eye. One purpose of orthoptic training is to attempt non-surgically by means of specialized instruments to straighten an eye which has deviated from its normal axis of parallelism, so the eyes will have normal binocular vision with depth perception. By single binocular vision is meant the fusion of the images seen by each eye, into a single impression. It is the result of the proper sensory and motor coordination of the extrinsic and intraocular muscles of the eye. It is apparent that orthoptic training can be used not only for those who have an apparent deviation or tropia of the eye, but also for those who have a latent deviation or phoria.

A hasty conclusion might be that orthoptic training replaces surgery in the correction of a squinted eye. This is not the case, however, for orthopsis is indicated in almost every surgical case both pre- and post-operatively in the attainment of single binocular vision.[1] Of what avail physiologically would straight eyes be if the normal function were absent? As we shall explain however, only a cosmetic result is possible in a great number of surgical corrections usually because of neglect on the part of the patient or physician in determining diagnosis or instituting orthoptic treatment early enough in life.

The family physician is often the first to be consulted by the distressed parent who suddenly discovers that the child has a crossed eye. Formerly it was common for the physician to reassure the parent that the child would "outgrow" the squint, and that it should be forgotten about during childhood. Every mother who has a child with a squint and every physician who might be consulted, should know, that in the early stages, a squint is often amenable to treatment, and that it is not a condition to be outgrown; and that if neglected, may result in blindness in the crossed eye.[2]

SCIENTIFIC APPROACH TO THE PROBLEM

As early as the seventh century attempts were made to treat squint by occlusion of the good eye to promote parallelism. It was not until the development of the amblyoscope by Worth in the middle of the eighteenth century that a scientific approach to the problem was instituted. The most modern of our current orthoptic treatment units are based on the amblyoscope.[3]

As in any medical problem the study of a squint should begin with a careful history. Often the mode of onset of the crossed eye can be traced by the parent and physician to a severe debilitating disease. Until the general health of the patient is improved or becomes normal, results of training will be impaired. In the evaluation of the type of a squint numerous procedures must be followed. The degree of vision in each eye with, and without glasses, is noted. Motility of the eyes in all cardinal directions is checked; the various ductions of the individual extraocular muscles are measured by means of prisms. The angle of squint is recorded, and careful cycloplegic refraction is performed, noting any effect on the type or amount of the squint. If it is determined by examination that the crossed eye is the result of a muscle paralysis, the problem of correction becomes one in the field of medical care or surgical correction and is not amenable to orthoptic training.

The age of the patient is of particular importance in determining the necessary procedures of training. The newborn infant up to the age of six or eight weeks will often exhibit a squint which if noticed by the parent may alarm them. However, children of this age are not using proper visual coordination inasmuch as the physiology of muscle coordination is in the developmental stage. It is not until the first or second month of life that the fusion of sensory and motor impulses in the brain center is established. But a manifest squint in a child over that age is not a normal reaction and investigation and treatment are indicated. The investigation of a child this age is somewhat limited but the type of squint and approximate deviation can be determined. Most commonly a marked imbalance between accommodation and convergence is found, resulting in one eye being turned inward.

The modus operandi of this type of squint is as follows: The third cranial nerve controls the muscles involved in the act of accommodation and convergence. The child who is very hyperopic, or farsighted, will have to accommodate an excessive amount in order to see clearly even at a distance. Upon looking at a close object the accommodation required for clear vision is proportionately greater still. This abnormally strong sensory stimulus is carried to the fusion center

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in the brain. From this center correspondingly strong impulses are sent over the motor fibers of the third nerve to the muscles of accommodation and converging internal rectus muscles. The proportion of stimulus between accommodation necessary for clear vision and convergence stimulus becomes so great at times that fusion is broken and one eye turns inward. Simply by determining under cyclopegic refraction the amount of hyperopia, and the wearing of corrective lenses even in so young a child, the eyes will often straighten. Similar conditions in older children may be corrected by educating them to dissociate the acts of accommodation and convergence.

Why is it so important to begin the correction of squint as early as possible? The infant or child with a crossed eye does not usually see with both eyes, for, if he did so there would be double vision. Such an experience is distressing as one can easily appreciate by creating diplopia on making pressure with the finger beneath the eyeball, causing a temporary diplopia. When diplopia is present the brain will soon suppress entirely the image from the turned eye and there will be only single monocular vision. Over an extended period of time the eye whose vision is being suppressed, becomes for practical purposes, blind. Such loss of vision in a turned eye in which there is no discernable pathology is termed amblyopia. Before beginning orthoptic training useful vision must be restored in the amblyopic eye. Rarely can this be accomplished in an individual over 12 years of age, and in such individuals a good cosmetic result by means of surgery is all that can be hoped for.

The method of choice in restoring vision to an amblyopic eye is by occlusion. By this we mean a complete covering of the good eye except when asleep. This occlusion must be accomplished over a period of one to three months. If there is no visual response in this time, occlusion will be of no avail and a surgical correction should be contemplated. During the period of occlusion the vision in the covered eye must be determined at two week intervals to be certain that amblyopia is not developing. As soon as vision in the crossed eye improves to a minimum of 20/60 orthoptic training can be instituted.[5]

MAJOR UNITS USED IN TRAINING

The major units used in training the eyes are large, heavy machines with numerous adjusting elements. Basically, however, they are all derived from the principle of the simple, original amblyoscope. This device consist of two adjustable tubes one end of each tube having an eyepiece, and at the other end a place to insert a picture. The tubes are adjustable so that each eye can observe a picture irrespective of the amount of squint. The first step after development of at least minimal vision in the crossed eye is the attainment of simultaneous macular perception. Related pictures such as a bird for one eye and a cage for the other eye are observed through the tubes adjusted to the angle of squint. By a gradual process of flashing light on first one picture and then on the other at increasing speeds, a time will be reached when both pictures will be seen at the same time.

During this course of training the corneal light reflexes must be closely observed in order to make certain that the patient is using the macular area of each eye. If the reflex is seen in the center of each cornea, the proper retinal area is being stimulated. But if the reflex in the crossed eye is noted to be off center, then an improper portion of the retina is being used. This occurs because the turned eye has adjusted itself to this particular abnormal position, and it corresponds to the squint which has been long present. To continue orthoptic training stimulating this improper area would be undesirable even if the eyes became straightened as a result of training or surgery, for by continuing to see at the retinal area corresponding to the former squint would only result in the eye once more returning to the original crossed condition. This is an explanation of why in some cases a good operative result becomes in a few weeks, a failure.[4]

FUSION EXERCISES

Fusion exercises are next in order for the patient who now exhibits simultaneous macular perception. A drawing of such a nature that the completeness of one picture depends upon the fusion with it of the other picture, is now placed before each arm in the unit. The fusion pictures are graded from simple fusion of images to much more complicated and difficult exercises in order to firmly develop the desire to create a single image from the two components. The next procedure is the maintenance of fusion while the tubes are turned gradually from the position of squint toward parallelism. This training period may be long and tedious requiring considerable patience, skill and cooperation on the part of the patient. The final steps of stereopsis and depth perception are less difficult to attain once fusion is firmly ingrained.

The above procedures form the ideal progression in the correction of a squint to establish single binocular vision with depth perception. To expect that even a majority of crossed eyes will respond in this manner would be wrong, for there are many factors which may make surgical correction desirable at any point after the proper diagnosis of the squint has been made. Some of these factors have been mentioned. Others are the amount of time to be spent on the training program before considering surgical correction; expense associated with the training program; psychological problems and type of cooperation expected. Probably in the greatest number of cases the ideal procedure should be one of an initial period of orthoptic exercises followed by surgery if response to educational methods is slow or stops. Then after surgery further training may be necessary in order to promote a normal physiological sensory-motor mechanism of the visual apparatus, thereby aiding in holding the eyes in their proper alignment.[6]

The purpose of the paper has been to present to the general practitioner a non-technical outline of the reasons for, and means of, orthoptic education. It has been emphasized that the institution of orthoptic procedures at an early age is necessary if normal physiological relationships are to be restored for the patient with a crossed eye. That such training does not replace surgery of the extraocular muscles in the correction of squint has been made clear, but that the training is an important adjunct to be used both pre- and post-operatively, can be appreciated.

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Tissue Susceptibility

In addition to the constitutional factor about which one can do very little and which for this reason is of little significance therapeutically, another predisposing factor is tissue susceptibility. It is a well-known clinical fact that peptic ulceration is likely to occur along the lesser curvature, in the pyloric antrum of the stomach and in the duodenal cap. Morton demonstrated that following the duodenal drainage operation ulcers produced on the greater curvature healed, whereas those on the lesser curvature remained and became chronic. Gage, Ochsner, and Hosoi conclusively demonstrated the tissue susceptibility of the lesser curvature to peptic ulceration. These experiments consisted of extirpation of the lesser and greater gastric curvature respectively and the administration of dilute hydrochloric acid or histamine. In those cases in which the lesser curvature remained after extirpation of the greater curvature, the incidence of ulceration was high (63.6 per cent), whereas in those in which the greater curvature remained after the removal of the lesser curvature no ulcers developed. Extirpation of the greater curvature, which in reality is a fundusectomy, as suggested by Connell, resulted in a much higher incidence of ulcertain than in animals with the lesser curvature removed, because of the greater susceptibility of the lesser curvature mucosa to ulceration. Matthews and Dragstedt showed that the susceptibility of the intestinal tract to acid gastric chyme increases directly with the aboral distance from the pylorus. The susceptibility of the intestinal tract to peptic digestion is illustrated by the occurrence of jejunal ulcers following gastrojejunostomy and the development of peptic ulcers in Meckel's diverticulum containing gastric mucosa. Tissue susceptibility and its effect upon therapy will be discussed subsequently.—Alton Ochsner, M.D., and Michael DeBakey, M.D., New Orleans, La.; Rocky Mountain Med. Jour., Vol. 38, No. 10, October, 1941.

Testosterone in Treatment of Impotence

Young men with impotence in whom there is demonstrable evidence of testicular deficiency receive little benefit from testosterone. The effectiveness of the hormone depends on the presence of definite deficiency. If there is clinical evidence of normal testicular function, such as a normal anatomic form, full growth of beard, a normal prostate and a normal output of urinary androgens, it is certain that there is no indication for the administration of testosterone. Invariably there is a psychic basis for the impotence and the treatment is best pursued through a psychiatric approach directed at overcoming inhibiting fears, such as fear of pregnancy in the mate, fear of veneral disease and fear of hell. Some such patients worry about the size of the penis, the extent of erection, and the prolongation of the act, like the duffer in golf who concentrates too much on stance, back swing and follow through instead of on hitting the ball. Such patients should be encouraged to approach intercourse with a purely selfish attitude, bent on enjoying its pleasure without regard to the pleasure of the mate.

Older men with impotence, who are classified by some physicians as menopausal patients, are more apt to be benefited by testosterone. The term menopause, however, in its application to the male is a strained term—I find it difficult to place patients in this classification. A good analogy with the female process is lacking; there is no sudden cessation of spermatogenesis, and the aging process is gradually progressive over a number of years.

The train of psychoneurotic symptoms, including impotence, occurs at various ages, following disappointments, failure and exhausting illness. The reassurance of psychotherapy combined with the use of testosterone often effects great benefit. Unfortunately, the man who is well on in years, baldheaded, fat bellied, thin limbed, hard of hearing, out of breath when he walks upstairs is never going to be a great lover again with any amount of testosterone. This type of patient must oftentimes be urged to make a mental adjustment of an abnormal sexual desire to a waning sexual power.—Walter M. Kearns, M.D., Milwaukee; Wisc. Med. Jour., Vol. 40, No. 10, October, 1941.

Mastoiditis Without Classical Symptoms

FRED W. DIXON, M.D.

WHILE the diagnosis of mastoid necrosis presents an individual problem in each case, there are certain textbook signs which are well known and diagnostic. There are, however, many instances where the symptoms are few or so misleading that the diagnostic ability of the general practitioner and even the otologist is taxed to the utmost.

There has come under my care, the past three months, six patients with suppuration of the mastoid process—the symptoms of which have been misleading. There was one female and five male adults, the average age being 47 years. Sulfanilamide was given to one patient which might have accounted for the masking of symptoms. There were five recoveries and one death. There was no history of an acute upper respiratory infection preceding the attack. With the exception of one patient whose discomfort began six months previous to operation, the duration of the illness was between four and five weeks.

The lack of symptoms was misleading. There was at no time any discharge from the external auditory canal. The temperature was elevated to 100° in one patient; the remaining temperatures, while under observation, were normal. The leukocyte count varied between 7,000 to 11,000. There was no swelling or redness over the mastoid process. In only two instances was there tenderness to deep pressure, and in these the tenderness was not marked, lasting only one or two days. There was a conductive type of deafness which was not pronounced. All of the patients were ambulatory and carried on their usual occupation.

The examination of the external auditory canal showed a narrowing of the canal anteroposteriorly in three instances, an elevation of the floor twice, while the remaining canal was normal in its lumen. The tympanic membrane was dull, red, thickened, and slightly bulging on their first visit to my office. The tympanic membranes whose bulging was more pronounced in two patients were opened but discharged only blood for 24 hours.

There was one symptom in common to all, namely deep bone ache. The pain was constant and was not relieved by mild sedatives, but required codeine and morphine. This symptom plus the distortion of the canal and drum was the only indication of pathology.

The X-ray picture was similar in all. This showed a sclerosed mastoid whose detail was blurred. The cell outline was not sharply defined and the ventilation was poor.

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At operation the mastoid cortex was eburnated, requiring a gouge for its removal. In the region of the lateral sinus much softened bone was encountered. In two patients there was a perisinus abscess. In another patient a lateral sinus thrombosis extended from the torcula to the jugular bulb which required extensive bony removal. This patient's only symptom, a dull boring headache, had existed for six months beginning without any cause. Sulfanilamide was given for one month previous to his first visit to my office. The rest received no chemotherapy.

At the time of operation, the mastoid cavity was cleaned and all debris and necrotic bone removed. The cavity was packed with iodiform gauze in four operations, while in the two remaining, two grams of sulfanilamide powder was placed in the cavity and the wound tightly closed. These healed by primary intention. Immediately after the operation the patients stated that the dull boring ache had disappeared. All made an uneventful recovery and left the hospital in six days.

The patient who did not recover was first seen 10 days prior to his death. His discomfort had begun two weeks previously and consisted of deep-seated pain in and about the ear. There was pain on deep pressure over the mastoid region which disappeared after 36 hours. The floor of the canal seemed elevated. The drum was thickened and red, but not bulging. The temperature was normal. The X-ray picture showed a scelerotic mastoid, but no bony destruction. This was misleading and was probably due to the thickened cortex. During the 10 days, while the patient was under observation, he performed his usual duties as a butcher. The canal became less swollen. The tympanic membrane lost its redness, and the mastoid pain disappeared. The hearing improved. The temperature remained normal. The deep-seated head-

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Submitted May 26, 1941.

ache persisted at night. When last seen in my office, he stated that he did not feel it necessary to return for observation. The same night, he suddenly became irrational, vomited, and showed signs of cerebellar irritation. He was brought to the hospital, unconscious, with a temperature of 103°; cloudy spinal fluid which showed type III pneumococcus. The mastoid cavity was opened. Under a dense cortex, a large perisinus abscess was seen to have ruptured into the posterior fossa. In the region of the antrum there was no bony necrosis. Despite blood transfusions and chemotherapy, the patient died 48 hours later. This man was the first of this series and, I believe, should have been operated upon when first seen.

The remaining five patients were operated upon with only the deep-seated persistent pain and a dull, thickened drum to indicate operation. The X-ray pictures, however, were helpful in four cases showing softened bone. They were all under the care of their family physician, and it was due only to his alertness that they were referred for consultation.

The pathway of infection was probably through the eustachian tube and tympanic cavity, although no history was obtained. Neither was the agent of the infection established in any of the five cases on which routine bacteriological studies were made. Direct smears of the mastoid exudate failed to show organisms in any of the five cases, and cultures of it on brain broth and blood agar remained sterile in four cases. Cultures of the material from the fifth case yielded a growth of staphylococcus aureus and staphylococcus albus. The presence of the latter, and the fact that the direct smears were negative suggest the probability of contamination in this case. The spinal fluid from the case which died contained pneumococcus, type III, yet both the smears and the cultures of the material present in the mastoid cells were negative.

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Determination of Hearing Loss

Any attempt to give an estimate of the hearing loss in either one or both ears on a pure tone audiometric test alone is not accurate. It was with this firm belief that I have devised a method of estimating a person's hearing loss in percentage figures taking into consideration the pure tone loss for the frequencies from 128 to 4096 inclusive and the whispered voice loss in decibels. Since the normal upper threshold of hearing has not been definitely established it becomes very difficult to figure what total loss of serviceable hearing really is.

At the Alexander Graham Bell School in Cleveland there are 22 students who have no palpebral reflex when a loud clap of the hands is made near their ear. These students are all 14 years of age, or over, and have obtained an excellent education by the means of lip reading. These students all seem to have a response to the pure tone audiometer between 85 and 90 decibels in the frequency range of 256 and 4096. As far as they are concerned they have 100 per cent loss of hearing.

Therefore, I have put my 100 per cent loss of hearing to pure tones for the six mentioned frequences at 80 decibels.

We also have 20 odd pupils who do not hear the whispered voice at 70 decibel loss on the audiometer but who have the ability to repeat loudly shouted numbers close to their ear. Therefore, I have estimated that 100 decibel loss to whispered voice is total loss thereby making it equivalent to a percentage figure. In computing the percentage loss of hearing in a given ear I take the average decibel loss for the six frequencies from 128 to 4096 inclusive, multiply this average by the factor 1.2 and then average this figure with the decibel loss to the whispered voice test through the audiometer. As an example I will give you my most recent case of rather typical otosclerosis: This patient, in the right ear, had an average decibel loss in the six frequencies of 42 decibels. The whispered voice loss was 25 decibels. I multiply the 42 decibel average pure tone loss by 1.2 and get the figure of 50.4. I then average 50.4 with 25.0 and obtain a percentage loss of 37.7 in this ear.—C. E. Kinney, M.D., Cleveland, Ohio; W. Va. Med Jour., Vol. 37, No. 10, October, 1941.

Complication Following Use of Sulfapyridine

The toxic symptoms and complications which may accompany the use of sulfapyridine are familiar to all of us. Fortunately they are few and most of them can be controlled or prevented if we are alert and recognize their clinical manifestations.

The gastro-intestinal tract frequently presents toxic symptoms. Such symptoms may vary from slight gastric distress and heart burn to nausea, vomiting, colicky pains, diarrhea, etc. Discontinuance of the drug usually results in the prompt disappearance of these symptoms.

Sulfapyridine should be tried in all streptococci infections which do not promptly respond to sulfanilamide, neoprontosil or sulfathiazole therapy.

The gastric mucous membranes should be protected when sulfapyridine is used whenever possible by solid foods and ample fluids. Where such protection cannot be given, intravenous therapy should be resorted to, using sufficient dilation and administering such dilutions slowly so as not to obilterate the lumen of the vein.—Sydner D. Maiden, M.D., Council Bluffs; Jour. Iowa S.M.S., Vol. XXXI, No. 10, October, 1941.

Adenocarcinoma of the Sigmoid Colon, Rectum and Anus in Children

Report of Two Cases in a 13-Year-Old Girl and an 8-Year-Old Boy with Summary of the Recorded Cases Up to 15 Years of Age

MELVIN OOSTING, M.D.

The Author

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CARCINOMA of the distal portion of the large intestine in young people less than 15 years of age is uncommon. We are not particularly surprised to find this malignancy between the third and fourth decades of life nor is it especially unusual between the second and third decades, but when found at an earlier age, it should be considered rare.

A discussion of this condition has been prompted by the finding of two cases of carcinoma of the rectum in children.

Case I—P.J., a 13-year-old colored female, was admitted to the Miami Valley Hospital from the Montgomery County Children's Home, as a diagnostic problem because of a gradual loss in weight. The child had no complaints and presented no acute symptoms. A loss of 12 pounds in weight had been noted over the last four-month period. Her temperature had varied from 99 to 100.6 F. (37.2 to 38.1 C.) in the afternoons and the pulse had ranged from 92 to 120 beats per minute at bed rest. A high caloric diet with supplementary ultraviolet light therapy and commonly used general tonics had not stopped the loss of weight. Her appetite had been good and she ate and slept well. There was no history of tuberculous contacts. The only childhood illness had been epidemic parotitis.

The patient was well developed although somewhat poorly nourished; she was alert and apparently in no pain or discomfort. The temperature was 99 F. (37.2 C.), the pulse 130 beats per minute and the respirations 15 per minute. The blood pressure was 115 systolic and 75 diastolic. The positive physical findings were few. In the left supraclavicular space there was a tumor mass about the size of a small English walnut. The mass was firmly fixed to the underlying tissues and changed position only when the clavicle was moved. The examining finger could not be pushed between the mass and the clavicle. It was firm, not tender, did not pulsate nor was it fluctuant. It had a slightly nodular surface over which the skin moved freely. It did not interfere with circulation because the blood pressure was equal in each arm. There were small, discrete lymph nodes palpable in the left posterior cervical chain. The chest was negative to percussion and auscultation. No masses were palpable in the abdomen nor were areas of tenderness or rigidity elicited.

The following laboratory procedures were carried out: A complete count revealed 5,100,000 red blood cells per cu. mm. of blood; hemoglobin of 70 per cent (Dare); a total leucocyte count of 15,000 with 70 per cent filamented and 10 per cent non-filamented polymorphonuclear neutrophiles and 20 per cent lymphocytes. The blood sedimentation time was 45 minutes (Linsenmeyer method). The urine showed a slight trace of albumin with occasional white blood cells. The blood Kline and Kahn precipitation tests for syphilis were negative. Blood agglutination tests for *Bacillus typhosus* and *paratyphosus* were negative while agglutination tests for *Brucella abortus* were weakly positive in dilutions of 1:80 and 1:160, using Huddleson's antigen. However, the skin test for *Brucella abortus* was negative. Tuberculin skin tests were negative. A roentgenogram of the chest was normal.

A biopsy of the supraclavicular tumor revealed lymphoid tissue showing complete replacement of the normal architecture by fibroblastic proliferation together with multiple large multinucleated giant cells and large pale staining vesicular cells with hyperchromatic nuclei. There was no evidence of eosinophilia or epithelioid reaction. The attached skeletal muscle structure was also infiltrated with similar cells. The microscopic picture was that of an undifferentiated carcinoma; the primary site could not be determined.

A few days later constipation became marked, associated with abdominal pains and increasing abdominal distention together with nausea and vomiting. The distention and abdominal pain could be relieved by enemas but for only a short time. She became moribund and died 10 days after the onset of the acute symptoms and 21 days after admission to the hospital.

A necropsy was performed four hours after death. The essential findings were as follows:

There was a generalized, subacute, organizing peritonitis present. At the rectosigmoid junction was an annular constricting mass consisting of firm and friable grayish-yellow cellular tissue extending 5 cm. along the bowel. This tissue appeared to infiltrate the bowel wall and adjacent mesenteric tissue. A tumor mass protruded into the lumen of the bowel causing almost complete obstruction. The mass was deeply ulcerated and showed in one area a perforation through the intestinal wall with the formation of an abscess. The periaortic lymph nodes were greatly enlarged, matted together, and had a soft rubbery consistency. The peripancreatic lymph nodes were also enlarged and had a similar appearance. The

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Submitted July 10, 1941.

liver and lungs showed no evidence of metastasis. Microscopic sections showed a highly malignant adenocarcinoma primary in the rectal mucosa with metastasis to lymph nodes and extension to the adjacent tissues. The atypical papilliferous structure of the neoplasm suggested origin in a mucosal papilloma although this could not be definitely determined.

Case II—E.M., a perfectly healthy eight-year-old white male, prolapsed a polyp from the rectum with a stool. The polyp was cut off and the base fulgurated. A pathologic diagnosis of early adenocarcinoma mucosum was made histologically. This child had had no symptoms referable to the intestines. Barium enemas and roentgenologic examinations revealed a second polyp higher in the descending colon. The outcome of this case will probably not be known for some time because it was seen only recently.

DISCUSSION

These are the first cases of adenocarcinoma of the lower bowel in young people under 20 years of age encountered in over 2000 autopsies and in the surgical cases at Miami Valley Hospital. Warthin,[1] in 1915, in a study of 2000 malignancies occurring during the age period from one to 30 found no cases of adenocarcinoma of the large bowel. He was of the opinion that it rarely, if ever, occurred. This appears to be the general opinion of most of the medical profession.

Chart I gives the authors, age and sex of the patients and sites of the proved cases of adenocarcinoma of the sigmoid, rectum and anus recorded in the literature. A total of 48 cases of adenocarcinoma primary in the large bowel in young people up to and including 15 years of age were found. Of these, 30 occurred in the sigmoid, rectum and anus, and 18 in the cecum and colon. Five occurred in the first decade of life. Phifer,[2] in 1923, found 10 cases of adenocarcinoma of the rectum and sigmoid in persons under 15 years of age, but since some of these were not verified by microscopic examination, all have not been included in this report. Since that time many new cases have been recorded and several authors have summarized the literature, but not all of the cases have been substantiated by microscopic proof. Consequently, only those cases having microscopic verification have been included in this summary.

Chart I

Recorded Cases of Adenocarcinoma of the Sigmoid, Rectum and Anus in Youth Under Fifteen Years of Age.

No.	Author	Year	Sex	Age	Location
1.	Steiner (3)	1865	M	9	Sigmoid
2.	Leijer (3)	1872	M	9	Sigmoid
3.	Clar (4)	1885	M	3	Sigmoid
4.	Stern (3)	1892	F	11	Rectum
5.	Allingham (3)	1896	M	13	Rectum
6.	Czerney (2)	1896	M	13	Rectum
7.	Garrard (5)	1897	M	12	Sigmoid
8.	Paultauf-Zupinger (2)	1900	F	12	Sigmoid
9.	Marsh (2)	1902	M	15	Sigmoid
10.	Parkinson (2)	1903	F	12	Rectum
11.	Milne (6)	1905	M	12	Rectum
12.	Bernouilles (2)	1907	M	15	Sigmoid
13.	Schneider (3)	1911	F	15	Rectum
14.	Olmstead (7)	1921	M	15	Sigmoid
15.	Davis, S. D. (8)	1929	M	14	Sigmoid
16.	Raiford-Buttles (9)	1933	F	13	Rectum
17.	Desaine (10)	1934	—	13	Anorectal
18.	Smith, D. (11)	1934	M	11	Rectum
19.	Ball (12)	1935	F	15	Sigmoid
20.	Fowler, R. H. (13)	1935	M	15	Anus
21.	Jordan-Chamberlain (14)	1937	M	13	Rectum
22.	Webster (5)	1938	F	9	Sigmoid
23.	Bacon-Sealy (15)	1939	M	4½	Rectum
24.	Lasnier (3)	—	F	13	Rectum
25.	Beth (3)	—	M	11	Rectum
26.	Luck (3)	—	F	15	Anorectal
27.	Cripps (15)	—	M	14	Rectum
28.	Michauz (15)	—	M	15	Rectum
29.	Godin (15)	—	—	15	Sigmoid
30.	Rome (15)	—	M	15	Rectum
31.	Oosting	1941	F	13	Rectosigmoid
32.	Oosting	1941	M	8	Rectum

Either the medical profession has become more cognizant of the fact that adenocarcinoma does occur in youth or the age incidence of adenocarcinoma is being lowered. The fact remains, however, that adenocarcinoma does occur in youth. This leads to the question, is there a "carcinoma age?" The implication of this term leads one to assume that malignancies are restricted to various age groups. As we know, the discovery of malignancies in the earlier decades of life is increasing. Therefore, this term should be discarded and every patient, whether old or young, must be considered a potential carcinoma patient.

CONCLUSION

Two cases of adenocarcinoma of the rectum occurring in a 13-year-old girl and an eight-year-old boy are recorded. These represent the thirty-first and thirty-second recorded cases occurring in persons under 15 years of age. Carcinoma of the lower bowel in youth, although uncommon, should be considered in every patient having obscure intestinal complaints.

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Present Views on Shock

H. S. APPLEBAUM, M.D.

FREEMAN[1] performed an experiment. He injected large quantities of adrenalin into a normal, unanesthetized dog. The dog went into shock and died. Now, what is the mechanism of this shock? Adrenalin constricts the smaller arteries. The blood pressure rises in the larger central arteries, but the flow of blood is reduced in the vessels distal to the constriction. The peripheral tissues thus are not supplied with enough blood. If this deprivation continues for a sufficiently long interval, the tissues and capillaries are injured due to anoxemia, and plasma escapes into the tissues. This results in a **reduction in blood volume.** As a consequence to this loss of blood volume, the blood pressure is lowered, the pulse becomes rapid and feeble, the skin is pale or livid, cold and clammy—in short there is produced a clinical picture of shock.

This is brought about, as stated above, by the adrenalin acting on the sympathetic nervous system, constricting the blood vessels. Freeman thus advances the theory of a sympatho-adrenal system for shock. He states further that when we examine the factors of importance in the production of shock we find they also cause vaso-constriction by stimulating the sympathetic nervous system. Cold, pain, fear, asphyxia, dehydration, and hemorrhage all produce constriction of blood vessels. To prove his point further, he performed a sympathectomy on a dog, bled that dog, and also bled a normal dog. In the normal dog, when the blood pressure was lowered by hemorrhage, the flow of blood decreased. Unless treated early, this reduction in circulation led to shock with concentration of the blood and negative reaction to transfusion.

In the sympathectomized dog, though the blood pressure was reduced to a lower level by hemorrhage, the blood flow was not reduced to so great a degree. Dilution of the blood occurred, and prompt recovery followed transfusion. In the normal animal vaso-constriction occurred, but if prolonged too far, an irreversible reaction occurred, so that transfusion was of no avail. In the sympathectomized dog, no such vaso-constriction can occur, hence prompt recovery is possible with transfusion.

Shock should, therefore, be defined as a process of loss of blood volume, brought about through tissue asphyxia which results from inadequate blood flow. No matter what the starting point, the dominating feature of shock is low blood volume. This is the first principle in the treatment of shock.

The second principle is the prevention of traumatic stimuli. Once the tissues have been injured by a long period of deficient blood flow, there is no effective way of bringing about recovery. This, in short, is Freeman's theory of shock. It sounds reasonable and readily explains many phases of shock. However, says Moon:[2] (a) it has not been demonstrated that the amount of epinephrine necessary to produce shock could be derived from the animal's own adrenal glands; (b) it has also been shown that adrenalectomized animals, maintained in a normal physiologic state, may be thrown into shock readily by the various agents which are used to produce that condition; (c) shock may be induced in animals which have recovered from bi-lateral sympathectomy as easily as in normal animals. The influence of the sympatho-adrenal system is thus eliminated in such experiments.

The Author

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According to Cannon[3] traumatic shock results from absorption of toxic substances from injured tissues. A group of dogs was subjected by Moon, Kornblum, and Morgan[17] to deep abdominal X-rays. After an interval of several days shock developed. The resulting circulatory disturbances were produced by absorption of cellular substances from the degenerated and necrotic tissue. Experiments of this type eliminate pain, emotional reactions, as well as hemorrhage and anesthesia as possible factors.

Swingle and his associates[4] showed that adrenalectomy will cause the development of the complete syndrome of shock in dogs, and that the injection of adrenal cortex will prevent shock or will cause it to abate in adrenalectomized animals. Later they showed that one function of the cortical hormone is to maintain the normal tonus of the capillary endothelium. Deficiency of this function resulting in capillary atony, explains satisfactorily the circulatory failure in adrenalectomized animals. The true cause of shock probably lies in a combination of factors, sympathetic, adrenal, toxic substances from injured tissue, and perhaps other factors working together or individually according to the nature of the cause.

Moon[2] emphasizes the circulatory failure of capillary origin in shock. It has been shown that capillaries possess tonus and contractility.

Submitted May 26, 1941.

Capillary endothelium is delicately sensitive to physiologic conditions such as oxygen tension and products of metabolic activity. It is likewise sensitive to certain chemicals, poisonous drugs, anesthetics, snake venoms, bacterial toxins, products of protein cleavage, and the like. When the endothelium is injured by any agent or condition, it becomes atonic and allows plasma to escape into the tissue spaces, thus producing edema. The corpuscles become closely packed in the dilated capillaries, and circulatory stasis results.

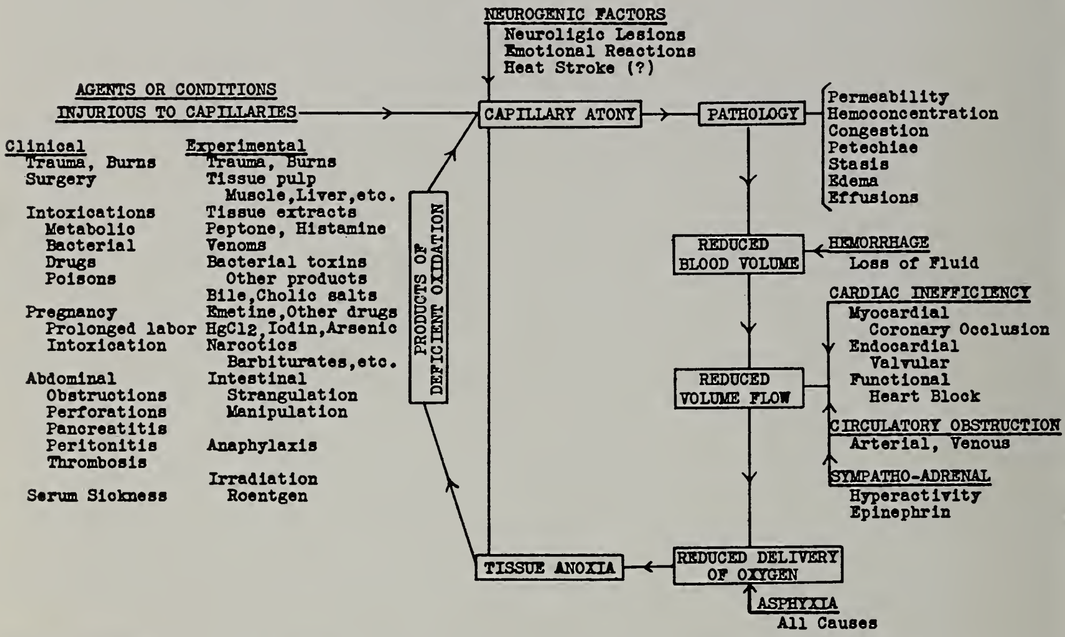
As a result of capillary atony there is leakage of plasma into the tissue spaces and cavities, reducing the actual blood volume, and producing **hemoconcentration.** This loss of blood volume, **which is the most important factor in shock,** reduces the efficiency of the circulation, and, if severe, may lead to further constriction of arterial pressure, cutting down further on the delivery of oxygen to the tissues. And when this tissue anoxia develops, the capillaries in turn become injured, atonic, and abnormally permeable. There is thus established a vicious circle between capillary atony and tissue anoxia.

Either factor essentially causes the other, and the result is circulatory failure. In other words, it is the result of uncompensated disparity between the volume of blood and the volume capacity of the vascular system. And this disparity arises from a decreased blood volume plus an increased volume capacity caused by the dilatation of capillaries and venules in extensive areas. (See chart.) Physiologically this is compensated by arterial vaso-constriction and by the discharge of blood from reservoir organs such as the spleen. As long as the compensation is effective, there is no serious decline in the blood pressure. But compensation has a limit; when this limit is overstepped, the water, so to speak, begins to spill over the dam. The blood pressure declines progressively and the complete syndrome of shock is presented.

CHART 1

The vicious circle and accessory factors.

By V. H. Moon[2]



DIAGNOSIS

From a clinical point of view, the most important definite factor in the diagnosis and treatment of traumatic shock is the **low blood pressure.** The diagnosis of shock cannot be made without a low blood pressure, and the degree of drop in the blood pressure roughly corresponds to the degree of shock. Not only does the low blood pressure often precede the other clinical manifestations, but its drop determines also the quantity of fluids to be administered. One continues treatment governed largely by the effect of the treatment on the blood pressure.[5]

The clinical picture. The patient is profoundly depressed. The skin is pale and cold and clammy, and it may be grayish; the face appears pinched and the nose prominent. The pulse is rapid and feeble, and the blood pressure and pulse pressure are low. There is great diminution or even cessation of urinary secretion. The temperature may be subnormal or rise very high in febrile collapse. There is muscular weakness and relaxation. Mental depression and apathy are present but consciousness is preserved until the end. When delirium and coma set in, death is usually near.[5]

Stages of shock. The first stage or primary shock is syncope, being characterized by suddenness of onset and tendency to recovery, especially in the head low position. **Secondary shock:** this develops from four to twenty-four hours after injury. When it terminates in less than four hours it is improbable that absorption of substances derived from damaged tissues is a significant factor. In such cases the circulatory deficiency arises from the effects of anesthesia, the loss of blood and fluid into the traumatized areas, and perhaps other factors. The view that the patient bleeds into the capillaries of the splanchnic area and his muscles, is no longer held, as little or no vaso-dilatation has been found experimentally.[6]

Burns, mechanism of burn shock. Subsequent to a burn, the capillaries in the injured area dilate. The circulation stagnates, the blood plasma escapes through these injured capillaries. If the burn involves a sufficient number of capillaries, the patient dies of shock due to a loss of blood fluid so rapid that nothing can be done to replace it. Intravenous fluids merely wash out into tissue spaces. This is circulatory shock from the mechanical loss of fluids, according to Blalock.[7] Now, besides the local, there are general signs of the inflammatory reaction. The system reaction comprises fever, malaise, nausea and vomiting, convulsions. This is the systemic effect of burns, perhaps due to histamine, causing the escape of fluid from the capillaries generally, extending into the lung, liver, and other parenchymatous organs, and finally to all parts of the body. Burned patients are thirsty because of this loss of fluids, and if unrestricted fluid is given to these patients they will become waterlogged, which will aggravate the condition.

Hemorrhage. Hemorrhage operates by reducing the oxygen-carrying capacity of the blood. Any marked reduction in the volume of flow will reduce correspondingly the delivery of oxygen to the tissues, thereby producing tissue anoxia, and, subsequently, capillary atony with the escape of plasma in the tissues, thus further reducing the blood volume. This effect results only when the erythrocytes and hemoglobin are reduced below 35 per cent of normal.[2] This condition can be readily detected by the **hemodilution** which accompanies it, and this is reflected in low hemoglobin and red blood count, pallor, low specific gravity of the blood, and low hematocritical reading. This is contrasted with all other types of shock in which, as a result of loss of plasma, **hemoconcentration** occurs, as readily shown by the high hemoglobin, red blood count, potassium, dextrose, and increased NPN and reduced alkali reserve, chloride and oxygen content, and delayed coagulability. (Moon[2]). A transfusion of blood in hemorrhage will quickly restore circulatory efficiency, if given before tissue anoxia has developed in a degree sufficient to cause capillary atony systematically.

Surgical or traumatic shock. There can be no doubt that absorption of toxins from degenerating necrotic tissue—traumatized areas—is a factor in shock production. However, this factor is not sufficient in itself to produce the syndrome in its entirety except in very extensive tissue destruction. (Reed[8]). Even then the elements of fear and pain are present, and contribute to the total syndrome picture. In surgery there are the additional factors of anesthesia and hemorrhage, and while each alone may not be sufficient to cause shock, acting together they may easily produce this picture. And mechanical trauma causes the release of certain toxic substances, histamine-like in their effect, which injure the capillaries, resulting in loss of their tonus, increasing their permeability, reducing the blood volume, and bringing about anoxia in the tissue—in short, a complete picture of shock, chemically and pathologically.

Miscellaneous: heat, asphyxia, etc. Shock from heat stroke: It has been found that at postmortem the organs of a case of heat stroke show capillary congestion as in wound shock. The exact mechanism is not known, but many believe it to be through effects on the central nervous system. In this connection let me say that heat cramps of engine room and furnace workers are produced by drinking large quantities of water following excessive loss of chloride in perspiration. This condition may be prevented or relieved by proper salt intake. This same mechanism is responsible, in part, at least, for the condition known as heat exhaustion.[9]

Lesions of the central nervous system may produce shock-like manifestations. This again may be brought about through the influence the central nervous system has on tonus of the capillaries, but the exact mechanism is obscure.[2]

Asphyxia from any cause produces tissue anoxia directly. If this is gradual in onset, it results in clinical manifestations like those which characterize shock arising from various causes. This is seen in CO poisoning recently fully discussed by Beck et al.[10] But it may be duplicated experimentally by causing animals to inhale any inert gas, or by gradually limiting the supply of oxygen. The lesions in CO poisoning, say these authors, are fundamentally vascular, viz: dilatation of the peripheral vessels, slowing of the blood stream, and increased permeability of the vessel walls with tendency to hemorrhage, perivascular infiltration, and edema, a familiar picture by now.

Adrenal. Swingle and his associates[4] have shown that adrenalectomy (Moon[2]) will cause the development of the complete syndrome of shock in dogs, and that injection of adrenal cortex extract will prevent shock or will cause it to abate in adrenalectomized animals. Later they showed that one function of the cortical hormone is to maintain the normal tonus of capillary endothelium. Others—Loeb,[11] Harrop,[12,13] Stewart and Rogoff[14]—have pointed out the importance of salt and water metabolism. In surgical and traumatic shock, the syndrome and blood chemistry findings are very similar to those encountered in adrenal cortical insufficiency in animals. Reed,[8] therefore, in 1936 began to use adrenal cortex in the prevention of surgical shock. He treated more than 50 surgical cases with excellent results. But this work needs confirmation.

Others—Scudder and Zwemer,[15] Perla[16]—believe one of its most vital actions is the regulation of potassium balance. Potassium liberated by diseased or injured tissue cells may circulate in the blood and disturb the electrolyte balance of all other cells. To many it seems very likely that potassium is the mysterious histamine-like substance to which now the term "H" is applied, and this may account for all conditions of shock, also nervous collapse, profound fatigue, etc. Broadening the picture, any cause which operates to injure the body cells, all the way from overwork to devastating, crushing injuries, produces a release of intracellular potassium, so necessary within the cell membrane and so injurious, even fatal, outside of it. Thus an interesting, unified explanation for all the stress states had been constructed. But how about changes in chlorides, carbohydrates, capillary anesthesia, emotional states? Just how do these fit into the picture? So far there is no satisfactory explanation. Besides, this theory lacks confirmation.

TREATMENT

Promptness in treatment is imperative. While severe shock may not respond to any form of treatment, early treatment may prevent the tissue anoxia with the resultant shock, or may prevent an irreversible action due to delay of treatment. One continues treatment governed largely by the effect on the blood pressure, or as Freeman[1] puts it, till there is a good blood flow, as reflected by good color, warm extremities, and a full pulse.

(1) **Blood transfusion** takes first place in the treatment of shock. Because of its protein content and the consequent high colloidal osmotic pressure, plasma does not leave the circulation as crystalloid solution, and therefore with its use it is possible to regulate effectively the volume of circulating blood. In hemorrhage particularly is blood transfusion valuable in that it not only replaces plasma but also red blood corpuscles which the patient has lost. However, in all other conditions of shock where there is a hemoconcentration, citrated plasma, or, better still, serum, is more desirable, for the following reasons:

(a) It does not add to the concentration of erythrocytes;
(b) No grouping or cross matching is necessary as it is entirely safe and free from reactions;
(c) It can be used in large and repeated doses;
(d) It is readily prepared, easily transported, and can be made available for instant use.

(2) **Glucose and saline** should be given as supplementary treatment and in moderate amount. Care, however, should be taken not to force too much fluid by mouth, as this may lower the blood chemistry by dilution and cause water intoxication. Nor is too much intravenous salt solution desirable as the fluid escapes too easily from the capillaries and adds to the waterlogging of the patient. Acacia solution may cause damage to the kidneys or liver, and is a foreign substance as far as blood is concerned. However, in the presence of excisosis (merely water deficiency) saline and glucose is perhaps the best infusion fluid.

(3) **Other treatment.** Absolute rest in bed should be secured, and pain and distress relieved. Morphine and alcohol are indicated. Tea, coffee, caffeine, and other stimulants may be of value. Body heat must be maintained. In abdominal distension, pitressin (1 cc) may be valuable. In short, all supportive measures are indicated. Epinephrine, according to the experience of Freeman[1] and others, not only does no good, as it does not act on the capillaries, but may do harm by constricting the smaller blood vessels and thus further cutting down on the blood supply of the capillaries.

CONCLUSION

This, in short, represents the present prevailing views on the mechanism of shock. There are many controversial points. Many ideas are still nebulous, but little by little the secrets of the intricate mechanism of the human machine are being exposed to the investigating eye. The future is promising.

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Endocrinology in Gynecological Practice

A. G. SAR-LOUIS, A.B., M.D., M.Sc. (Med.)

A LARGE part of gynecological practice, medical and surgical, has its origin in imbalance of secretions of ovaries, anterior pituitary, suprarenals, thyroid, parathyroid, and pancreas. Almost any glandular dyscrasia may invade gynecologic practice.

ESTROGENS

Probably the most widespread use of estrogens is in the treatment of the menopausal syndrome. However, it is not always necessary to use estrogens as frequently the physiologic readjustment to endocrine imbalance is accomplished harmoniously without discomfort. The patient may even feel better than during active sex life. She may be spontaneously relieved of migraine, certain skin disorders and excessive thinness. Abnormal secretory activity of the anterior pituitary at this period may be inhibited by the administration of estrogens or androgens or by irradiation of the pituitary gland. Estrogens alone substitute the failing natural hormone. Occasionally the diagnosis is difficult, particularly if the typical hot flushes are lacking.

Case I. Woman of foreign birth, aged 49, complained of pain in left side and inability to read. She was so confused mentally that further history could not be obtained. There was moderate obesity. Sausage-shaped movable mass in lower left quadrant. Estradiol benzoate, 10,000 R.U. intramuscularly every second day. After the third injection she was much clearer mentally and stated that during the past six months she had consulted numerous physicians and that now for the first time she felt nearly normal, even improved. Mental and emotional stability were returning. She laughingly described her recent queer behavior. She had been irritable with her family, had bought merchandise for which she had no use, had hidden from people in the basement, had climbed trees and on one occasion had cooked a fowl without its being dressed. She had had no hot flashes or other vasomotor disturbances. She had, however, a spastic colon and had lost the power of visual accommodation. She was most probably a case of incipient involutional melancholia. Treatment was continued for several months, twice weekly, and she remained entirely normal during this period. With intermission of treatment for a few months symptoms recurred.

Case II. Secretary, aged 45, complained of severe cardiac palpitation, insomnia, and inability to concentrate on her work. Normal electrocardiogram. She had lost considerable weight and had a worried expression. Estradiol benzoate, 10,000 R.U. twice a week, restored her balance. She slept better and gained weight. She was again able to concentrate although she still had occasional short attacks of tachycardia. This patient also never had any other typical vasomotor disturbances.

The Author

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Novak[1] calling attention to the fact that not all ailments at this age are a part of the menopausal syndrome, states: "The woman who begins at the age of 40 to excuse her vagaries on the change of life basis may not cease to menstruate until the age of 50, this constituting a very effective refutation of her hypothesis". One of these vagaries generally admitted to be amenable to estrogen therapy is the hot flush which frequently appears long before cessation of menses. Similarly other types of menopausal disturbances appearing early are relieved by estrogens.

In a young woman a state not unlike that seen at the menopause is frequently encountered in which there is imbalance of the neuroglandular mechanism. As a rule these younger women do not complain of hot flushes but may have other vasomotor disturbances such as increased sweating or cold extremities. They may have numerous and varied nervous complaints and are frequently hyperemotional. Dysmenorrhea and irregular menses, sometimes amenorrhea and often sterility, exist in these cases of early ovarian failure.

There seems to be considerable divergence of opinion regarding dosage of estrogens. We have never seen ill effects from large amounts but have had on occasion no result from small dosages. Since the severity of the symptoms is no guide to the estrogen requirement, we prefer initial dosages of 10,000 R.U. two or three times weekly. When diagnosis is in doubt four or five large doses of estrogen, as a therapeutic test, are used. With initial improvement the dosage is reduced to 6,000 R.U. and later to 2,000 R.U. and finally the patient is maintained on oral estrogen therapy. The oral dose must be five to ten times the intramuscular. No arbitrary statement can be made concerning required length of treatment as some patients are readjusted in a few months while others require years.

Discussion of menopausal therapy is incomplete without comment on stilbestrol, an artificial substance with estrogenic properties, which on account of its comparatively low cost would be preferred except for its toxicity. Salmon and Geist[2]

Submitted April 23, 1941.

from Mount Sinai Hospital, New York, report 45 cases treated with stilbestrol and conclude that although excessive gonadotropic secretion is inhibited, giving the menopausal patient relief from hot flushes, she is not given that feeling of well-being and nervous stability usually resulting from the use of natural estrogens. Toxic symptoms—nausea, vomiting, and vertigo—were noted in 64 per cent of the cases treated, greatly reducing the value of stilbestrol as a therapeutic agent. McCullagh and Jones,[3] although more enthusiastic, reported 27 per cent incidence of toxic symptoms. Even this would seem to contraindicate the widespread use of stilbestrol.

In addition to use in menopause, estrogens are widely employed in vulvovaginitis in children.

Contrary to earlier observations, we have not found estrogens of value in dysmenorrhea. Although estrogens stimulate uterine and breast growth, and their periodic withdrawal may even bring about uterine bleeding simulating menstruation, we are definitely opposed to their use in amenorrhea and genital hypoplasia. Such transient results are scarcely commensurate with the cost of treatment and the ill effect on the ovary through pituitary gonadotropic inhibition, virtually equivalent to castration.

PROGESTIN

Low pregnandiol excretion curves in cases of habitual abortion indicate that early, spontaneous, threatened abortion and habitual abortion may often be due to diminished function of the corpus luteum. We have seen four cases, with three or more previous spontaneous abortions, delivered of living children, three carried through to term and the fourth with premature labor at the seventh month. All were given large tri-weekly doses of progesterone.

Case III. Woman in early weeks of pregnancy showing signs of abortion. Had seven previous spontaneous miscarriages at from two to six months without apparent cause; 5 mg. progesterone three times weekly for duration of her pregnancy. Cramp-like pains disappeared and despite a mild toxemia she was delivered of a living child at term.

Progesterone was also used in four cases of threatened abortion. Three of these four carried successfully to term but the fourth aborted. One of the three successful cases was operated upon for a cyst with twisted pedicle at the sixth week of pregnancy, the corpus luteum being removed. Twenty-four hours later she had a slight vaginal bleeding and some colicky pains; 10 mg. progesterone was administered daily for ten days. Pains and bleeding stopped. She later was delivered of a living child.

We are somewhat skeptical concerning the value of progesterone in the treatment of primary dysmenorrhea since heredity, emotional and environmental factors probably account for most cases. Results of treatment by any method must, therefore, be very carefully analyzed. We are more enthusiastic about the value of progesterone in the treatment of the syndrome, premenstrual tension. This distressing state is present to some degree in many women and consists of nervous depression, irritability, melancholia, and emotional crisis, sometimes with headache, fatigue, backache, and lower abdominal pain, beginning about a week before the onset of menses. Progesterone, 5 mg. every other day, beginning about ten days before the period and continuing until the flow appears, followed by orally effective corpus luteum in subsequent periods, brings amelioration of the symptoms, demonstrating necessity for functioning corpus luteum in maintaining proper balance in the neuroendocrine system during the menstrual cycle.

ANDROGENS

Since testosterone depresses the activity of the anterior pituitary, as do the estrogens, it is useful in the treatment of the menopause, especially in the presence of uterine hemorrhage and migraine. Menorrhagia, not responding to progesterone, often responds to testosterone. No treatment for uterine bleeding should be given until diagnostic curettage is performed. It should thus be made certain that the bleeding is either functional or from a benign tumor before hormone treatment is begun. Testosterone therapy is best employed as an interim procedure after curettage and until radiation therapy becomes effective. Kurzrok employs testosterone in a dosage of 25 mg. twice weekly in those women who bleed and have been irradiated.

Favorable reports have been made of the use of testosterone in the treatment of dysmenorrhea. Androgens, particularly the convenient oral form, have gained wide use recently in inhibition of lactation. The after-pains of labor and certain mastopathies may be relieved by testosterone.

Wilson[4] reports on the use of testosterone in endometriosis. In this distressing condition painful bleeding of aberrant endometrial tissue is prevented by inhibition of ovulation through the administration of testosterone.

Intractable pain of inoperable carcinoma, particularly of pelvic organs and breast, is controlled by massive doses of testosterone. Long continued use of large doses of male hormone in the female may cause excessive hair growth on the face, chest and legs, lowering of the pitch of the voice, acne, atrophic vaginitis, and increase in size of the clitoris. All these changes, except sometimes facial hirsutism, disappear with discontinuance of therapy. Total dose of testosterone in one course of treatment should not exceed 700 mg.

GONADOTROPES

Genital hypoplasia is the result of pituitary gonadotropic deficiency. Minor degrees of such deficiency with abnormality of only the latter half or luteal phase of the menstrual cycle to frank cases of infantilism, may be relieved by the administration of gonadotropic hormones such as those obtained from pregnancy urine and from pregnant mare serum. Animal experimentation has definitely shown that these gonadotropic substances stimulate and develop the ovaries. Opinion, however, seems to be divided on the results obtained with this therapy in the human female. We are convinced of the efficacy despite the fact that we have seen development occur spontaneously. For example, a patient with infantile uterus, found at appendectomy, two years later had a normal pregnancy without hormone therapy.

Evans[5] and his co-workers showed that when pregnancy urine was combined with pituitary gonadotropic extract they obtained a growth of rat ovaries which was greater than from the sum of each substance used singly. On the basis of this work, we prefer to treat cases requiring gonadotropic stimulation with a synergistic combination of the hormones from pregnant mare serum and pregnancy urine.

SUMMARY

Endocrine treatment of frequently encountered gynecologic conditions is discussed—estrogens in menopause, involutional melancholia, vulvovaginitis, amenorrhea, dysmenorrhea, and sterility; progestin in habitual and threatened abortion, dysmenorrhea, and premenstrual tension; androgens in menopause, menorrhagia, dysmenorrhea, inhibition of lactation, mastopathies, after-pains, endometriosis, and pain from carcinoma; and gonadotropes, particularly synergistic combinations of pregnant mare serum and pregnancy urine hormones, in hypogonadism and infantilism.

We wish to express our sincere thanks to Dr. W. H. Stoner of the Schering Corporation, Bloomfield, N. J., for the generous supply of Progynon-B, Proluton, Pranone, Oreton, Anteron, and Pranturon, which made these clinical tests possible.

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In aviation the cardiovascular system is important principally in relation to the maintenance of adequate tissue metabolism in order that the different organs of the body may operate continuously at a high level of efficiency.—Louis Faugeres Bishop, Jr., M.D., New York City. N.Y.S. Jour. of Med., Vol. 41, No. 19, October 1, 1941.

Influenza

The most important factor in treating a case of influenza is the maintenance of complete bed rest throughout the febrile period and for a period of three to five days after the temperature has returned to normal. Exposure to cold air increases the irritation of the upper respiratory tract and often produces an excessive cough. Visitors should be excluded from the sick-room, and only one or two attendants should serve in the nursing care of the patient. During the febrile period the patient should have a fluid intake of 3,000 to 4,000 cc. daily, and his diet should consist mainly of carbohydrate beverages. When nausea and vomiting prevent an adequate fluid and food intake by mouth, the parenteral administration of 5 per cent glucose in physiological salt solution is advisable so as to insure an optimum fluid intake. After the first few days, as the appetite improves, the diet should include soft, bland foods as well as liquid foods. A high-caloric diet is essential during the period of convalescence in order to overcome the general weakness.

Mouth washes and throat gargles should be used regularly, three to four times daily until the throat irritation has subsided. Warm solutions of physiological salt solution, compound solution of sodium borate, or Dobell's solution are effective. When nasal blocking is present one per cent aqueous solution of ephedrine is indicated.

In uncomplicated cases of influenza the drug therapy is largely symptomatic. For headache and generalized aching the use of acetylsalicylic acid, 10 grains, or phenacetin, 5 grains, every four hours is usually effective. If these drugs are not well tolerated, or stronger sedative action is indicated, codeine in ¼ to ½ grain doses may be given every three to four hours. The codeine is especially beneficial in the control of severe cough, but such medication should not be used to the point where the cough reflex is seriously depressed. Expectorant cough mixtures usually are not indicated in the absence of complications and are to be avoided if symptoms of gastric irritation are present. Steam inhalations are often most effective when the cough is unproductive or very distressing. All symptoms should be interpreted in terms of their disturbing effect on the patient. As it is of utmost importance that the patient obtain sufficient rest, it is frequently advisable to give moderate doses of one of the barbiturates for rest at night, or smaller doses every six hours to allay restlessness. The bowels should move daily. Mild laxatives or saline enemas may be used. Strong laxatives are to be avoided.

Drugs of the sulfonamide group have not proved to be of value in the treatment of influenza; however, they are of tremendous value in the treatment of many of its complications.—Russell A. Flack, M.D., Lafayette; Jour. Ind. S.M.A., Vol. 34, No. 10, October, 1941.

Cavernous Sinus Thrombosis

Recovery Following Treatment With Sulfathiazole

J. P. EICHHORN, M.D.

THE following case is reported to call attention to the value of sulfathiazole therapy in acute cavernous sinus thrombosis. Before sulfonamides were available, recovery from acute fulminating cavernous sinus thrombosis was very rare. Cavenagh[1] in 1936, which was about the time of the general introduction of sulfonamides, found only seven such cases in the entire literature. Yaskin[2] reported in 1939, eleven consecutive fatal cases.

Seydell,[3] Pace[4] and Barnshaw[5] reported individual cases which recovered after treatment with sulfanilamide. However, Rubin and Cutler[6] had three patients die, in spite of treatment with large amounts of sulfanilamide. Morrison and Schindler[7] reported recovery in a five-year-old boy with signs of bilateral cavernous sinus thrombosis who was treated with sulfaypridine. Lyons[8] treated two patients with large amounts of heparin, supplemented first with sulfapyridine and later with prolonged courses of sulfathiazole. Both patients ultimately recovered, but pulmonary infarction complicated each case, possibly because of clot disintegration and embolization.

Wolfe and Wolfe[9] have recently reported the recovery of a patient after treatment with sulfathiazole. The cavernous sinus thrombosis resulted from a nasal furuncle in which the causative organism was hemolytic staphylococcus aureus. This patient had no abnormal findings in the spinal fluid.

REPORT OF A CASE

O. M., a 45-year-old white woman, was admitted to the Medical Service of the Cleveland City Hospital complaining of severe, generalized headache for 12 hours. Seven hours before admission she had projectile vomiting and vertigo, and became unable to open her right eye.

Physical examination revealed an alert patient with complete ptosis of the right eyelid. A furuncle was seen on the right eyelid. When the eye was opened manually the eyeball was fixed in a median position. There was no reaction to light or in accommodation, and the patient complained of diplopia. The left eye was entirely normal. An area of hypesthesia over the right side of the nose and forehead was found to correspond to the distribution of the ophthalmic division of the trigeminal nerve. During the following day exophthalmos and congestion of the retinal veins appeared in the affected eye. Severe herpes simplex about the mouth and on the right check was noted on the eighth hospital day.

The Author.

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During the second hospital day, the patient's temperature rose rapidly to 40 C. and she became stuporous. Rigidity of the neck was noted. Lumbar puncture revealed xanthochromic spinal fluid under 12 mm. of mercury pressure, containing 1200 erythrocytes per cubic mm.

Sulfathiazole was given by mouth beginning on the second hospital day, until a total of 68 Gms. had been given in ten days. Citrated blood was given in small daily transfusions to a total of 1700 cc.

The temperature remained elevated and the patient stuporous for nine days. She then began to improve and after 18 hospital days the temperature remained normal. Lumbar puncture was repeated on the sixth and ninth hospital days and bloody fluid found under pressures of 30 and 15 mm. of mercury respectively. Blood cultures and spinal fluid cultures revealed no organisms.

The exophthalmos subsided slowly and, after a normal lumbar puncture on the thirty-sixth hospital day, the patient was discharged. When last seen she could move her eyelid, but the eyeball was still fixed.

COMMENT

The diagnosis of cavernous sinus thrombosis appears justified in this case because of the known infection of the eyelid, the proptosis, the retinal venous engorgement, and the paresis of the third, fourth, and sixth cranial nerves. The signs of meningeal irritation were marked. The blood in the spinal fluid may well have been due to intracranial venous engorgement with hemorrhage per diapedesis. Eagleton[10] interprets the presence of herpes simplex as a sign of irritation of the Gasserian ganglion due to infection of the cavernous sinus. In Eagleton's classification this falls into the "anterior" type of acute, fulminating thrombophlebitis because of the presumed invasion of the ophthalmic veins from the furuncle on the eyelid. Sulfathiazole was chosen as the chemotherapeutic agent because of the

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Submitted June 13, 1941.

overwhelming frequency of staphylococcus aureus as the causative organism in cavernous sinus thrombosis.[7]

SUMMARY

A case is reported in which a patient recovered from acute cavernous sinus thrombosis with signs of marked meningeal irritation after treatment with sulfathiazole.

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Influence of Age on Cardiovascular Disease

Probably, the changes incident to ageing are more dependent on the vascular system than any other organ or systems. As inadequate blood supply is incompatible with a normal tissue. If this occurs comparatively rapidly, as in the case of a failing heart, the changes in its function, or even structure, are grossly manifest and easily identified as disease. If however, this deficiency of blood supply is due to changes in the capillaries through loss of elastic tissue or their obliteration, the changes in the function or the structure proceed slowly, and may be consistent with the involution due to ageing. These minute vascular changes may influence function before structural changes, even microscopic, are demonstrable. Such changes as wrinkling and pallor of the skin, forgetfulness, muscle stiffness and other signs accompanying increasing age, probably are due to insufficient oxygen supply due to this type of vascular change. "The systematic progressive decrease, in the number of glomeruli, beginning early in life, apparently the result of influences at work on the capillary tufts," as described by Moore, lends support to this contention. The number, and the function of the capillaries, likewise the size, shape and function of their endothelial cells varies widely in the various organs and tissues. Information of these changes is obscure. Some evidence indicates that "there appears to be a distinct fall in the number of capillaries (in the skin) with age." This decrease was also found in the skin of arteriosclerotic persons. A decrease in the capillaries is noted with atrophy or shrinkage of the organs, but whether the vascular change is primary or secondary is disputable. Logical imagination appears to indicate that atrophy of the cells would be intimately related to their nutrition, for which it would be dependent on capillaries. Therefore capillary failure would be the primary functional step in this process. With resultant atrophy or degeneration of the cells of a tissue or organ, the capillaries would also be involved in the same process, as would affect the other structures of the organ or tissue. Regardless of the means by which the ageing process is produced, the structures manifesting these changes suffer from nutritional deficiencies. The whole category of changes incident to ageing in all tissues and organs are subject to, and their function and structure, modified by this effect.—Frederick W. Niehaus, M.D. Omaha; Neb. S.M. Jour., Vol. 26, No. 10, October, 1941.

Toxemia of Pregnancy

All hypertension must not be considered as arteriolosclerotic in origin and this discussion implies that other causes than arteriolosclerosis are absent. Inasmuch as the diagnosis of hypertension is dependent on the blood pressure determinations, a few elemental considerations may be permitted. General opinion has set the limits of systolic and diastolic readings for hypertension at 140 and 90 respectively, with the diastolic level being taken at the change of note. Authoritative opinion also attaches greater significance to the diastolic level of blood pressure, it being postulated that an elevation of the diastolic pressure is equivalent to twice that elevation of the systolic pressure. Hypertension is considered permanently established if present six weeks after the end of pregnancy, and its absence after this time must be proved by careful and repeated examinations. Albuminuria is generally not present and kidney functional tests usually are normal. Albuminuria when present, disturbed kidney function, and cardiac hypertrophy are manifestations of more advanced arteriolosclerosis.

Three conclusions would seem manifest:

1. Arteriolosclerosis is frequently caused by toxemia, the duration of which may be significant.

2. Arteriolosclerosis is considered established if hypertension is present six weeks after a toxemia.

3. With arteriolosclerosis established, serious consideration must be given to the prevention or interruption of subsequent pregancies.—C. J. Ehrenberg, M.D., Minneapolis; Minn. Med., Vol. 24, No. 10, October, 1941.

Ruptured Diverticulum of the Ileum

Case Record Presenting Clinical Problems

SIMON KOLETSKY, M.D.

A FIFTY-YEAR-OLD male Negro was admitted to University Hospitals on February 6, 1941, service of Dr. C. H. Lenhart, with a chief complaint of abdominal pain of three days' duration. At the onset the pain was intermittent and cramp-like and was situated in the region of the umbilicus. The patient felt nauseated but did not vomit. The day before admission he took a cathartic and had five liquid bowel movements. The pain then shifted to the right lower quadrant and became progressively more severe. The patient's past health had been excellent. There was no previous history of gastrointestinal symptoms. On admission the temperature was 39.2° C., pulse 130 and respiration 22. The positive physical findings were limited to the abdomen. There was generalized abdominal tenderness, especially over the right lower quadrant, which also showed marked muscle spasm. A possible mass was outlined just above McBurney's point. The rectal examination was negative. The urine examination was negative except for a 2 plus albumin. The white blood cells were 20,000.

The diagnosis of acute appendicitis with perforation or with periappendiceal abscess was made and the patient was operated upon immediately.

At operation there was a large inflammatory mass, approximately 12 cm. in diameter, in the ileocecal region. This was covered by adherent omentum. Since the mass was thought to be an organizing abscess following ruptured appendix, the cecum was mobilized and a large uterine pack was placed around the lateral portion of the abscess cavity for drainage. Postoperatively the patient was placed on constant gastric suction and continuous stupes to the abdomen. The temperature rose to 40° and the pulse to 160 and both remaianed at about this level during his four postoperative days. Abdominal distention, tenderness and muscle spasm persisted on the right side. There was a moderate amount of purulent drainage from the wound. On the fourth postoperative day, his pulse became weak and he died suddenly.

At autopsy (7294) the diagnoses were: acute inflammation and perforation of a diverticulum of the terminal ileum adjacent to the ileocecal valve; abscess formation in right lower quadrant of abdomen; dilatation of small intestine (paralytic ileus); diverticula of cecum and ascending colon; passive hyperemia of lungs, liver and spleen; and marked cloudy swelling of parenchymatous viscera.

In the terminal ileum, 1.5 cm. from the ileocecal valve, there was a small diverticulum the seat of acute inflammation and necrosis. This was perforated and the perforation led into an abscess cavity, measuring 8 cm. in its longest dimension, in the right lower quadrant of the abdomen, where there was also a localized peritonitis. In the cecum and ascending colon, for a distance of 11 cm. beyond the ileocecal valve, were numerous diverticula with a maximum diameter of 1 cm. The appendix, which lay anterior to the cecum, was normal.

Microscopic sections of the ileum at the site of perforation showed an acute necrotizing and suppurative inflammation extending through all layers. The tract of the perforation was lined by necrotic purulent material. Owing to necrosis the layers of the wall of the diverticulum could not be identified.

Microscopic sections of the diverticula of the ascending colon showed that their walls consisted of a mucosa and a thin submucosa with no muscle. The muscular layer of the intestine stopped abruptly at the edge of the diverticula.

COMMENT

Localized peritonitis and abscess formation, due to perforation of a diverticulum of the ileum, was the cause of death in this patient. In all probability, a localized peritonitis may be accepted as a cause of death, as is a generalized peritonitis, especially in the older age period. The perforation was due to acute inflammation followed by ulceration and necrosis.

Diverticula are much less frequent in the small intestine than in the large intestine. In the small intestine they are found most commonly in the duodenum. They are usually multiple and are attached to the concave side of the bowel lateral to the mesenteric attachment. Diverticulum of the ileum is distinctly rare.

The present case is not only unusual in that there was a solitary lesion in the terminal ileum but also because the diverticula of the large bowel were confined to the cecum and ascending colon. Diverticula of the large intestine are much more frequent in the descending than in the ascending colon. In this case the diverticula were of the so-called "false" type, having presumably been produced by a separation of the muscle layer so as to permit the mucosa and submucosa to bulge out between them.

The clinical picture very closely resembled that of appendicitis with perforation. A differential diagnosis between perforated diverticulum and perforated appendix is virtually impossible when the diverticulum is so near the appendix.

The treatment of perforated diverticulum is a troublesome problem. Drainage of the abscess and general supportive measures are practically the only available procedures. Perforated diverticulum has a greater operative mortality than carcinoma of the bowel. In the latter the patient may be adequately prepared for operation, whereas in the former operation must be performed immediately. The operation of choice in diverticulitis is resection of the affected intestine. However, in the presence of abscess and high fever, as in this patient, resection cannot be carried out.

This is the fifth of a series of "Case Records Presenting Clinical Problems," selected by Dr. H. T. Karsner from the Clinical-Pathological Conferences of the Institute of Pathology, Western Reserve University and University Hospitals, Cleveland, Ohio.

Management of Acne Vulgaris*

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ACNE vulgaris is a chronic inflammatory disease of the skin, involving the hair follicle and oil gland structures. It is characterized by papules and pustules and, in severe cases, by nodules and permanently disfiguring scars. Collections of sebaceous material, known as comedones or blackheads, retained in the excretory ducts of the hair follicles or sebaceous glands and an oily seborrhoea frequently precede and often accompany an acne.

Acne is the cutaneous disease of adolescence. It is most apt to occur at the time the pilosebaceous structures are rapidly developing. Acne is a more common disorder than its statistical incidence would reveal. The prevailing opinion, that the disease will disappear spontaneously after the individual matures, and the consequent failure to apply to the physician for advice and therapy, lead to the underestimation of the frequency of this disease. Both sexes are equally involved in various degrees of severity and length of duration of the process. The recognition of the ordinary case is readily accomplished. Its papulopustular eruption is characteristically limited almost exclusively to the face, neck, upper part of the chest and back, and over the shoulders.

Biological growth and development, influenced and dominated by the physiological action of the various glands of internal secretion during this chaotic period called adolescence, must be the prime factors in the production of this common skin malady. It is the result of these various component factors not pacing in unison or harmony or not stabilized as yet, at this period of adolescence, to a normal, steady, progressive, planned growth and development, that excites overstimulation of the sebaceous glands and hair follicles. The disease itself is not constitutionally serious. It is a reflection of cutaneous lowered resistance with subsequent secondary pyogenic infection, encouraged by neglect and abuse. The result of these combined factors, if the case is not properly and individually supervised, is all too frequently permanent, unsightly scarring and disfigurement.

MANAGEMENT MAY BE DIFFICULT

The management of acne vulgaris may be difficult, for the many factors, previously mentioned, enter into a comprehensive understanding of this problem. It should be understood from the onset that there are no specific drugs or therapies. A medication prescribed in one case with brilliant results, may fall short or meet with complete failure when applied to the next 20 consecutive cases. The disease is a self-limited one and this limiting characteristic is grossly varied from a few months with negligible cutaneous lesions to five, ten, or fifteen years with great severity of complications and scarring. The average duration of acne vulgaris, however, is from two to four years. One may easily be led astray and tricked by this self-limiting characteristic of the disease into injudicious acclaim of the most lately prescribed drug or therapeutic procedure used. One of the predominant characteristics of the disease is its chronicity in the form of relapses. These occur often, in spite of therapy which may have proved so efficacious in the beginning. Thus, one can readily visualize the numerous difficulties and perplexities encountered in the management of acne vulgaris. The problem, in reality, resolves itself not in treatment of the skin alone by drug or therapy but in sympathetic, scientific, professional supervision and guidance of the patient himself with his cutaneous complication. Only through the appropriate, judicious application of drugs and therapeutic procedures by the family physician or consultant, with the earnest and sincere cooperation of the patient and his parents can a satisfactory result be obtained in the shortest possible time, at the least possible expense.

NO STEREOTYPED PROCEDURE

No stereotyped therapeutic procedure can be routinely applied to all cases. Instead, detailed, individualized therapy must be used for each case and varied from time to time to meet changes as they arise. The treatment of acne includes the general care of the patient and the local treatment of the lesions. Treatment further resolves itself into that performed by the patient in following the instructions of his doctor and those procedures actually done by the physician. Little improvement will be accomplished in the treatment of these cases, if the entire responsibility rests with the physician. His responsibility is one of supervision and administration of indicated therapy. No physician in a short office consultation, at intervals of one, two, or three weeks can perform miracles. Complete cooperation by the patient, contributing meticulous observance of hygienic instructions ordered by his physician and diligent, daily, topical applications so prescribed, is of paramount importance in securing an excellent, early end result. More than 50 per cent of the favorable results of therapy rests upon the shoulders of the patient or his parents, in following the physician's instructions. Cures can be obtained, in from three to eight months, in 60 per cent of unselected cases by the sole use of topical remedies that keep the skin in a constant state of mild desquamation and without the use of X-ray therapy. Almost all topical therapy in acne is some combination of sulphur, resorcin, or salicylic acid. The involved areas are thoroughly washed before retiring with toilet soap and a face cloth, rinsed, and dried. This cleansing is followed by the application of some keratolytic or astringent medication.

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*Dr. Rauschkolb was selected to write an editorial summary on the above topic by a committee of leading Ohio dermatologists.

CONSTITUTIONAL MANAGEMENT

Constipation is corrected in most patients by diet, exercise, and habit. Cathartics are avoided, if at all possible. Attention is directed toward securing a proper amount of sleep and regularity of rest. Outdoor exercise and exposure to the sun are advised, but excesses of either are to be avoided. Frequently patients are seen whose emotional reaction to their acne is out of proportion to its severity. In such patients treatment of a psycho-therapeutic nature is carried out, if necessary with the aid of the family. The opinion of many dermatologists is that diet has been frankly overemphasized in the treatment of acne. However, Sutton insists proper diet is essential to success and claims a low fat diet, in conjunction with thyroxin and iodized salt, is a most important therapeutic procedure, Wile, on the other hand, stresses a low carbohydrate diet and advises against the routine use of iodized salt. In individuals suffering from acne who are in the stage of active growth and development and who require, therefore, a high caloric intake, a fair rule for diet is to permit as much food and as frequent feeding as the individual desires but to avoid excesses of fat, carbohydrate, and condiments.

Hormonal therapy, vitamins, vaccines, toxoids, bacteriophage, liver therapy, and iron deficiency therapy have no direct beneficial effect on acne. However, where indicated, these should be given to patients whenever the clinical and laboratory findings warrant their use. On the whole, results have been disappointing with the empirical use of iron, arsenic, calcium, tin, and other similar drugs, regardless of product, dose, technic or method of administration. Foreign protein therapy, injections of whole blood (10cc.) or sterile milk (5cc.) intramuscularly at weekly intervals are of value in hastening resolution and healing in the pustular and indurated types of acne.

LOCAL CARE

The local care of the skin is most important. All mechanical and surgical procedures should be performed by the physician. Any attempt to remove comedones on the part of the patient is to be discouraged because of the damage that may result. The procedures which are employed are incision and thorough expression of all deep-seated abscesses, the incision of the pustule being made with a fine iridectomy knife, and the removal of all sebaceous accumulations by the same method. The comedones are best removed by an extractor for that purpose. So-called acne surgery is of great help and should be performed at each visit when indicated. Desquamating or peeling measures, such as carbon dioxide snow, carbon dioxide and acetone, and intensive ultraviolet radiation with either air or water cooled lamps, are fraught with danger and should be avoided.

The topical therapy applied by the patient merits detailed consideration. For oily skins the involved areas are thoroughly washed twice daily, in the morning and before retiring, with a bland soap and face cloth, rinsed and dried. This cleansing may be followed by the application of a paste such as:

℞		Gm. vel. cc.	
Sulphur precipitated			
Kaolin	aa	6	
Zinc Oxide Ointment U.S.P.	q.s.	60	

Sig. Apply at bedtime or after each washing, if tolerated.

If the skin is too dry or during winter months, this preparation may be too strong for constant use, and the following may be substituted:

℞		Gm. vel. cc.	
Bichloride of Mercury			13
Resorcin		2	
Bay Rum	q.s.	180	

Sig. Rub vigorously over the face with a piece of cotton before retiring and again in the morning.

Less severe in keratolytic action but more astringent are the following:

℞		Gm. vel. cc.	
Lotio Alba		120	

Sig. Apply at bedtime—
or

℞		Gm. vel. cc.	
Phenol			6
Zinc Sulphate		1	3
Sulphurated Potash			
Sulphur precipitated	aa	2	
Rose Water	q.s.	180	

Sig. Apply once or twice a day after cleansing the skin.

If severe keratolytic action is desired either of the following may find use:

℞		Gm. vel. cc.	
Salicylic Acid		2	
Balsam Peru		4	
Anhydrous Lanolin		12	
Petrolatum	q.s.	30	

Sig. Apply to the skin for one hour. Then remove by washing—

or

℞

		Gm. vel. cc.	
Sodium hyposulphite		15	
Resorcin		8	
Betanapthol			24
Alcohol		30	
Rose Water	q.s.	120	

Sig. Apply to the skin three times a day for several days.

Topical remedies should keep the skin in a constant state of mild desquamation.

Finally, there is the question of Roentgen therapy. X-ray therapy should be used in conjunction with appropriate local and supportive therapy and not as a substitute for such treatment. There are definite indications and contraindications for its use. The methods above enumerated are definitely within the scope of practicability for the general practitioner and should be tried before resorting to X-ray therapy. Roentgen therapy is really the court of last appeal and its use should be definitely restricted to one trained in its administration. It is outside the scope of this paper to treat of the technic and detail of the X-ray therapy of acne vulgaris. That exposition is the subject of a future presentation.

1808 Republic Bldg.

Ambulance

FRANK A. RIEBEL, M.D.

"You just better let him set, Doc. I think he's a gonner." The ambulance driver's practiced eye slid over the figure on the chair in a tenement areaway. Already graying, the sufferer's chest heaved, and the sputtering of pulmonary edema drowned out the heart sounds in the interne's stethoscope.

Thoughts cartwheeled through the ambulance surgeon's mind. "I'm the doctor; what does the driver know?"—"If he's dying he should be let alone."—"If I take him and he dies on the ambulance I have to buy the boys a keg of beer; that's the rule."

Then "Let's go Charlie. We're taking him." Gently the thin figure was hoisted inside, and the ambulance clamoured away. The dying man obstinately tried to sit up, and the interne wrestled him flat. A pound on the glass "Not our hospital, Charlie. The nearest one, and hurry!"

Down Avenue B they swayed, and into the Flower Hospital court-yard. As they turned in, the man breathed his last. Hastily the interne and driver carried the man into the emergency room, blessedly empty. When the attendant appeared, "Sorry, nurse, but I swear he was alive when we brought him in, and you'll have to keep him."

And so the culprits fled, the prices of humiliation and beer saved.

Nights later the interne crawled across two barges to reach a third anchored in East River, to the little shanty where the watchman had suffered a heart attack. To the policeman and driver accompanying him he said "No, he can't walk. We'll have to carry him in a chair. And officer, you'll have to go along to help me brace him up. You know we must never let a heart case like this lie down. Orthopnea, you know." And so a cardinal point was burned into a still-frightened young man's mind.

How can one ever forget those kaleidoscopic months on the ambulance, those stretchings of wings for the first time, after the four years of mouth-to-mouth feeding in the medical nest?

The call at dawn to the Coty factory, where the night watchman has blown his brains into his straw hat—in the farthest corner a pop-eyed rookie policeman swallowing as rapidly as the salivary glands will permit.

Next you climb into a pungent tenement to cart away a TB. Just as you pull away from the curb a member of the family—poor foreigner—dumbly slips two dollars into your hand. No word. Just pleading eyes.

Up into the Porto Rican section. No memory of the case remains. Just glistening brown bodies, and the hauntingly sweet odor of oily perfumed skins.

Teeming Harlem at night-fall. A piccaninny has fallen onto a picket fence; a close circle of inquisitive faces—jungle eyes in the metropolis.

A trip into Bernarr McFadden's editorial offices. (Yes, they get sick there, too.) Later the theatre rush hour; the ambulance driver obligingly routes you through the jam of Broadway. Rather hard on the patient, if he is in a hurry, but fun!

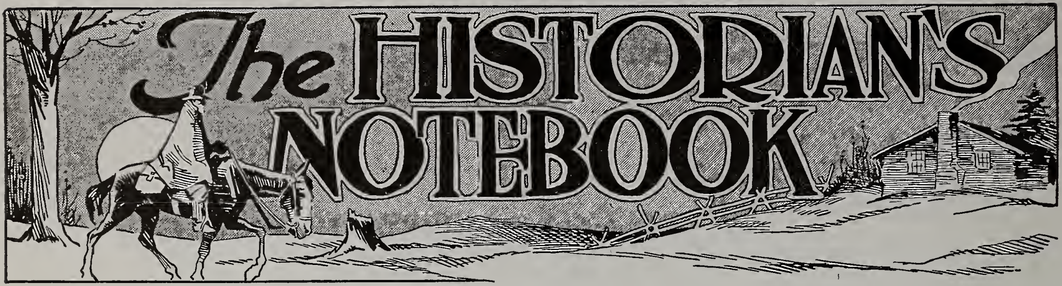
Silly calls, too. A cut finger. A headache. A moocher who wants to hole up in the hospital for a while—all problems for the interne, sharpening his cunning, making him wary, teaching him to command situations.

Yes, we do have drama in medicine, and the movies don't always overdraw. Now in private practice it still lives, but deeper, and at a slower pace.

But for life at its uttermost, with all the pulse-pounding verve it can arouse, give me the ambulance!

In asthma the oxygen is usually effective after the first injection, but there have been some failures and prolonged treatment may be necessary. Two patients were treated for a month with inhalation and subcutaneous oxygen without effect, but these are the exceptions.—John H. Evans, M.D., Buffalo; N.Y. S. Jour. of Med., Vol. 41, No. 19, October 1, 1941.

Note—One of a series of medical literary essays written at the request of The Editor.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

ASTHMA AND THE OHIO PHYSICIAN; AN HISTORICAL SKETCH

JONATHAN FORMAN, M.D., Columbus, Ohio

OHIO, because of its geographical position, the fertility of its soil and its ownership during the colonial days, attracted its early settlers from three different cultural areas, i.e. Virginia, Pennsylvania, and New England. Traceable to this convergence of different social cultures, Ohio was, during the XIXth century, the major battleground between the regular practitioners of medicine and those of the various medical sects. The center of Homeopathy was long in northern Ohio while the origins and centers of activity of both Electicism and Physiomedicalism came to rest in Cincinnati after a brief sojourn in and around Columbus. It has been conservatively estimated that 100 years ago less than one-third of the citizens of central Ohio ever had occasion to consult a practitioner of regular medicine.

The history of Ohio medicine, therefore, is a representative story of American medicine as a whole. It should, therefore, prove interesting to spend a few minutes going through the records of the past and see how asthma has been looked upon and treated here in Ohio. We are trying to summarize what we have learned by reading the medical journals of the state, consulting all the texts on the practice and theory of physic, as well as the transaction of the state and many of the local medical societies.

In doing this we soon found out that the development of clinical allergy rests more upon the development of a technique derived from bacteriology than it does on new concept of the fundamental mechanism underlying asthma and its other manifestations.

Along with the settlers came men who were graduates in medicine and some who had learned their medicine from a preceptor. Few men, indeed, for the first 40 years were able to go East to medical school. In the meantime Ohio began to have medical schools of its own—Cincinnati in 1819, Western Reserve in 1834, and Columbus in 1847. By far the majority, however, were compelled to learn only from a preceptor. Administrators of these schools for reasons that were not entirely unselfish attempted to get these men to complete their education by attending their schools for a course of lectures. Dean John Butterfield writing in the house organ of the Starling Medical College, *The Ohio Medical and Surgical Journal* described the preceptor trained physician of these days, as follows:

> "A very considerable proportion of the practitioners of medicine in our state never received a regular medical education. . . . Some of them entered a physician's office and after studying, from a few months to two or three years, perhaps Bell's Anatomy and Thomas or Eberle's Practice more, started out with a certificate from their preceptor, hoisted their 'shingle' in backward settlement and was, henceforth, past all redemption or recall dubbed 'doctors'."

If we turn to the texts on Practice which were in the library of these preceptors, we find that they were all under the English school of thought for as Oliver Wendell Holmes put it, "Most American writing consists of simply putting British portraits of disease in American frames. On the subject of asthma in pioneer days in Ohio this meant the writing of Robert Bree. All were agreed in those days that asthma was the result of a spasmodic contraction of the bronchia. Bree did not agree with this but insisted rather that this symptom should be attributed to a convulsion of these muscles for the purpose of expelling excessive secretions from the bronchia. While all followed Bree's teaching on the cause and management of the disease few agreed with his concept of the pathology and it was not until 1850 that anyone successfully challenged the spasm concept. This in turn had to give way to the spasms idea in our times only again to see the emphasis on the edema and exudate.

Read before the American Association for the Study of Allergy, Cleveland, Ohio, June 3, 1941.

In Eberle and these other pioneer Ohio texts much was made of a predisposition to asthma giving some title to an hereditary complaint existing along with an irritable habit of the body.

The exciting causes listed in these early texts sound surprisingly familiar; "Particular state of the air, irritating matters such as dusts, perfumes, tobacco smoke, metallic fumes, and the vapors of sulphur" and the attacks were said to be brought on by exercise, exposure to cold, emotional upsets and the great law of convulsive motion, viz., the certain consequence of its repeated attacks will be that increased mobility of the whole from which occasions a renewal of the diseased action by mere force of habit."

Eberle's own concept of proximate cause of asthma sounds strangely familiar today. He wrote, "My own opinion is that it depends on a peculiar irritation of the pneumongastric nerves, in consequence of which the regular transmission of nervous influences to the lungs is interrupted".

The treatment as set forth for these pioneer doctors was that bleeding which theoretically ought to be good to bring about relaxation did not seem to be a good treatment except in occasional plethoric persons. Experience had taught that relaxation which was the thing to be desired could best be obtained through the combined effect of nauseant expectorants, acids and narcotics.

Of the nauseants recommended were:

- Squills and vinegar.
- Ipecac.
- Lobelia.
- Tobacco, especially in those who had never used it.
- Stramonium which was at that time falling into disrepute.

Of the acids and narcotics:

- Tr. Squills.
- Nitric acid.
- Opium.
- Prussic acid highly recommended by Eberle of Cincinnati in his textbook on Practice.

Of the general remedies blisters and 20 grain doses of cobwebs were apparently well thought of.

It is strange that Samuel Thomson did not write of asthma in his book since his system of healing was based upon the nauseant effect of lobelia inflata. In the various issues of the *Thomsonian Recorder*, published in Columbus, Ohio, under the able editorship of Alvin Curtis, later to become the founder of the school of Physiomedicine, great claims were made and cases reported in which the systematic purging, warming, and sweating according to the strict Thomsonian technic had relieved asthma when the methods of the regular doctors had failed. In one of the later editions of the Thomsonian manual (1835 edition p. 139) we do find one of these testimonial case reports.

> "An extraordinary case of asthma of Mrs. Hannah Coleman, who had applied to six physicians without receiving any beneficial effect, by using Dr. Thomson's medicine, she was enabled to lay in bed and rest completely for the first time in twelve years as testified by her husband, Ephriam Coleman, Newington. December 3, 1821."

The success of this school of practice must have made its impression on those of the regular school for we find Professor Eberle of the Ohio Medical College of Cincinnati writing in the 1834 edition of his text, of Lobelia inflata, "I regard this vegetable as decidedly the most valuable remedy we possess for arresting or mitigating the asthmatic paroxysm. I have known a violent fit of asthma to be completely allayed by it in the course of 30 minutes".

From the viewpoints set forth before there is little change for several years. Although in the East and in Europe about 1858 the idea of bronchial spasms was being challenged successfully. Not much can be found in the Ohio journals and transactions on the subject. In 1862 the Committee of the Ohio State Medical Society reporting on new remedies under the chairmanship of E. B. Stevens of Cincinnati mentioned the subject and said that "as a relief to the oppressed state of the lungs in asthma, the inhalation of medicinal vapors affords a delightful result that is not to be overlooked".

At the annual meeting of the State Society in 1864 members listened to a report on asthma from its committee under the chairmanship of Thad A. Reamy, M.D. This committee could not be moved from the idea of bronchial spasm. We read: "Another set of pathologists claim that asthma is humoral, that a specific humoral disturbance exists and causes asthma. If this be true, then asthma could not be produced by pouring cold water on the instep (Salter) or inhaling ipecac (Reamy)."

It is apparent that the case reports included in this report had been influenced by those in the textbook, especially that of Austin Flint himself. For instance:

> "Quite a remarkable case occurred in my practice last year. A married lady, aged fifty years, residing in Zanesville, has had asthma in a severe form for fourteen years, the intervals, however, always being complete and the attacks of rather short duration but coming on regularly every three months and always at night. During an attack of which she suffered in June last, she, from accident occupied a bed in a large lower room having usually lodged in the upper part of the house. When she recovered from the attack, I prevailed upon her to continue her lodging in the lower room. She has done so regularly and up to this time has not had a return of the disease (one year)".

The chairman reported that he had used for the radical cure of asthma—Nitrate of Potash in 48 cases—10 have fully recovered; 16 were definitely improved with milder attacks and longer intervals; 22 have not been improved.

J. R. Black of Newark also reported good results in the 14 cases which he treated with this same remedy.

Another case report in this document should interest those of you who are interested in allergy to insects and the stings. Dr. Spencer of Brownsville, reported:

> "Mrs. S., a married lady, nursing, aged 34, had suffered frequent mild attacks, so mild as to seldom demand medical attention. She was handling green fruit and was stung by a bee on the middle finger of the right hand. She complained at the time of much pain, the finger became swollen and in an half an hour the lymphatics could be traced up the arm by red lines almost to the axilla of the same side and in an hour she was suffering from a severe attack of asthma as I ever witnessed. Relief followed an emetic of ipecac and she has not suffered an attack since.

In general the treatment of all was emetics, nauseants, antispasmodics, ether, choloroform, and burning nitre paper and stramonium leaves. Only Dr. Spencer of Brownsville mentioned the use of KI.

The next mention of asthma in the transactions of the Ohio State Medical Society occurred in 1871 by Dr. D. D. Bramble of Cincinnati. "Several cases of asthma have been reported as being successfully relieved treated by chloral. Dr. Andrew Miles of Cincinnati presented me with the reports of a number of his cases of asthma which he treated with chloral, the second dose usually producing the required effect."

In several of the many contributions on ether and chloroform appearing so regularly in the communications of the 50's and 60's, we find them recommended for the treatment of asthma. "Not infrequently the paroxysms are completely controlled by it, the patient passing in the space of a few minutes, from a condition of great suffering into one of ease and comfort. As the year went on chloroform became the drug of choice until we find James T. Whittaker, professor of medicine in the Ohio Medical College writing in textbook on practice (1873) that there is no case of asthma that will resist the inhalation of this drug.

We find opium more and more boldly recommended until in the 70's we come across the suggestion that if the internal administration of opium or morphine fail, the experiment of a subcutaneous injection of a solution of morphine may be made.

By 1885 the concept of the disease had so sharpened itself in the minds of our teachers that they were willing to say that every prominent writer on asthma except Lebert concedes that the tendency to asthma is hereditary. Of the exciting causes they now could say that dusts of various kinds, the pollens of plants, especially the grasses, rye, oats, wheat, Indian corn, and ragweed, certain vapors, gases, smoke and the emanations from many species of animals have all been known to excite attacks of asthma. Some persons are so sensitive that the simple act of brushing their clothes is sufficient to bring on a paroxysm. Others are unable to inhale the perfumes of roses, lillies, heliotrope, and many other flowers without suffering an attack. The dust of hay will often cause paroxysm even in those who are hay-fever subjects. Since Cullen first published the case of an apothecary's wife who had asthma whenever ipecac was powdered in her husband's shop, numerous cases of a similar nature have been recorded.

In the 80's we begin to revive the concept that was held by our pioneer physicians that there was a uterine type of asthma and demanded measures corresponding to the hysterical nature of the disease. Nasal catarrh, hypertrophy of the turbinates and nasal polypi were all increasingly emphasized as having something to do with asthma and their operative correction became ever more important and highly regarded.

In these days, too, compressed air in special chambers both portable and stationary cabinets were employed in an attempt to more oxygen into the system and so we find Prof. Whittaker (Cincinnati, 1893) recommending oxygen itself.

In the textbooks of the 90's we find much space devoted to crystals, spirals, and eosinophiles in the sputum.

It is not worth this audience's time to detail the next 40 years in which little mention of asthma is made in any of the Ohio Medical Journals. Usually this takes the form of prescriptions containing KI in various combinations used as "fillers". Nor is it worthwhile to recall the impact that the studies in anaphylaxis had on our conception of the mechanism or the great boon the adrenalin's discovery was to the practicing physician. Ohio, through Stewart and Rogoff at Western Reserve and Roy Hoskins at Ohio State did much work on the pharmacology and physiology of this drug.

There is one character in Ohio medicine to whom honor should be paid and that is James McIlvaine Phillips of Columbus who was practicing clinical allergy with as clear an understanding as any of us and with greater skill than most of us a way back in 1915. He came into the field with an excellent background of experimental immuniology. He always insisted from his study of dogs that the lesion of asthma was a hive in the bronchial tube. Allergy lost a great deal when he lost his eyesight and gave himself to the breeding of dogs. This brings us to the first world's war and to the work of men present in the room today.

Our advances in the understanding and management of asthma are few. Skin testing and adrenalin are the two outstanding ones. These two do make all the difference in the world so far as our results in the relief of the patient are concerned.

Proceedings of the Council

Plans for 1942 Annual Meeting Approved at Meeting on October 5; Committee Appointments by President Confirmed; Issuance of Handbook on Medical Service Plans Authorized; Miscellaneous Business Transacted

A REGULAR meeting of The Council of the Ohio State Medical Association was held in the State Headquarters Office, Columbus, on Sunday, October 5, 1941, with the following in attendance: President Paryzek, Past-President Skipp; Treasurer Beer; Councilors Schriver, Hogue, Noble, Brindley, McNamee, Rutledge, Goehring, Swan, Seiler, Sherburne, and Burley; Dr. Forman, Editor of *The Journal*; Executive Secretary Nelson, Assistant Executive Secretary Saville, and Director of Public Education Aszling.

The minutes of the meetings of The Council held on June 3 and 4, 1941, in Cleveland, were **approved** as published in the July issue of *The Journal.*

Membership—Membership statistics were announced as follows: Membership as of October 5, 1941—6,475, compared to 6,387 as of the same date a year ago and to 6,475 as of December 31, 1940. Of the total number of members to date 260 have been reported as in active military service.

Members of The Council then reported on visits to and activities in their respective Councilor Districts.

ANNUAL MEETING

Financial Report—Dr. Sherburne, chairman of the Committee on Auditing and Appropriations, submitted a report on the expenses for the 1941 Annual Meeting, June 3-4, in Cleveland. The report showed that the total expenditures were $495.65, leaving a balance of $4.35 in the appropriation for the 1941 Annual Meeting. Dr. Sherburne also reported that a total of $1,348.57 was contributed by the State Association toward local entertainment for the 1941 Session of the American Medical Association in Cleveland. The total amount which had been appropriated by The Council for this item was $1,600.00, making the unexpended balance $251.43.

Resolution Referred—Resolution A pertaining to recodification of the laws relating to tuberculosis control, adopted by the House of Delegates at the 1941 Annual Meeting and which instructed The Council to authorize a study of this question, on **motion** by Dr. Schriver, seconded by Dr. McNamee and **carried**, was referred to the Committee on Public Relations and Economics.

1942 Annual Meeting—Following a general discussion, on **motion** by Dr. McNamee, seconded by Dr. Noble and **carried**, The Council set the dates, Tuesday, Wednesday, and Thursday, April 28, 29, and 30 for the 1942 Annual Meeting of the State Association in Columbus and designated the Neil House as the place and headquarters for the meeting.

Committee Report—A lengthy report from the Committee on Scientific Work, which had met in Columbus on Sunday, September 21, 1941, making numerous recommendations for the setup and program for the 1942 Annual Meeting in Columbus was **approved**, on **motion** by Dr. Sherburne, seconded by Dr. Seiler and **carried.** In addition to presenting a preliminary outline for the scientific program and a time schedule for the meeting, the report made the following recommendations: That an Educational Exhibit be arranged; that a meeting of the Section on Public Health and Preventive Medicine be discontinued for the 1942 Annual Meeting, but that this should not preclude those interested in that specialty from holding a luncheon or dinner session if they so desire; that, if possible, a continuous program of motion pictures in a room especially set aside for that purpose be arranged; that Dr. John W. Wilce, Columbus, be invited to serve as the general chairman of the Columbus Committees on Arrangements.

Section Officers—Two vacancies among the Section Officers were filled by The Council, on **motion** by Dr. Brindley, seconded by Dr. McNamee and **carried.** Dr. George T. Harding, Columbus, was appointed chairman of the Section on Nervous and Mental Diseases, succeeding Dr. Nicholas Michael, Columbus, now in active military service. The secretary of that section is Dr. Howard D. Fabing, Cincinnati. Dr. Lloyd King Felter, Cincinnati, was appointed secretary of the Section on Pediatrics, succeeding Dr. John E. Brown, Jr., Columbus, now in active military service. Dr. Edward A. Wagner, Cincinnati, is chairman of that section.

Secretaries' Conference—After a general discussion, on **motion** by Dr. Noble, seconded by Dr. Sherburne and **carried,** The Council instructed the Committee on Scientific Work and the Executive Secretary to arrange for a joint conference of presidents and secretaries of county medical societies and the Officers and Councilors of the State Association at sometime during the 1942 Annual Meeting. It was suggested that suitable entertainment be planned either in the form of a luncheon, dinner, or smoker with ample opportunity for informal discussion and a general get-together for all attending, attendance to be by invitation.

COMMITTEE APPOINTMENTS

The President, Dr. Paryzek, submitted to The Council a list of special committee and sub-committee appointments as follows, and such appointments were confirmed by The Council on **motion** by Dr. McNamee, seconded by Dr. Swan and **carried:**

Committee on Medical Service Plans—Dr. John E. Rauschkolb, Cleveland, chairman; Dr. Robert C. Rothenberg, Cincinnati; Dr. G. A. Woodhouse, Pleasant Hill; Dr. Dow Allard, Portsmouth; Dr. Jonathan Forman, Columbus; Dr. Carl R. Damron, Mansfield. Members ex officio: Dr. Harry V. Paryzek, President; Dr. Edward J. McCormick, President-Elect; and Dr. William M. Skipp, Past-President.

Committee on Medical Preparedness—Dr. Robert Conard, Wilmington, chairman; Dr. Thomas P. Sharkey, Dayton; Dr. Roland H. Good, Van Wert; Dr. Dale Wilson, Toledo; Dr. James N. Wychgel, Cleveland; Dr. H. H. Musser, Akron; Dr. Carl A. Lincke, Carrollton; Dr. Blaine R. Goldsberry, Athens; Dr. George G. Hunter, Ironton; Dr. Claude S. Perry, Columbus; Dr. Charles R. Keller, Mansfield.

Sub-Committee on Workmen's Compensation—Dr. Barney J. Hein, Toledo, chairman; Dr. D. M. Glover, Cleveland; Dr. Malcolm Cook, Hamilton; Dr. Robert L. Eastman, Mt. Vernon; Dr. J. Craig Bowman, Upper Sandusky; Dr. John H. Skavlem, Cincinnati.

Sub-Committee on Legislation—Dr. Ralph M. Watkins, Cleveland, chairman; Dr. O. J. Walker, Youngstown, vice-chairman; Dr. D. W. Heusinkveld, Cincinnati; Dr. J. C. Larkin, Hillsboro; Dr. Clyde M. Fitch, Portsmouth; Dr. A. Howard Smith, Marietta; Dr. I. B. Harris, Columbus; Dr. W. W. Trostel, Piqua; Dr. Carl Sawyer, Marion; Dr. Jay W. Calhoon, Uhrichsville; Dr. J. W. Schoolnic, East Liverpool; Dr. John M. Van Dyke, Canton; Dr. James G. Blower, Akron; Dr. M. D. Shilling, Ashland; Dr. George F. Linn, Norwalk; Dr. D. J. Slosser, Defiance; Dr. A. A. Brindley, Toledo.

Sub-Committee on Public Health Education—Dr. Carl A. Wilzbach, Cincinnati, chairman; Dr. V. C. Rowland, Cleveland; Dr. C. I. Stephen, Ansonia; Dr. James A. Doull, Cleveland; Dr. F. L. Shively, Dayton; Dr. Edward King, Cincinnati; Dr. M. D. Shilling, Ashland; Dr. R. K. Ramsayer, Canton; Dr. C. E. Hufford, Toledo; Dr. L. D. Bonar, Mansfield.

Committee on Poor Relief—Dr. Walter K. Stewart, Youngstown, chairman; Dr. E. O. Swartz, Cincinnati; Dr. R. S. Binkley, Dayton; Dr. R. N. Whitehead, Bowling Green; Dr. E. B. Gillette, Toledo; Dr. F. S. Van Dyke, Canton; Dr. W. L. Denny, Cambridge; Dr. Dow Allard, Portsmouth; Dr. F. C. Callaway, Marysville; Dr. Fowler B. Roberts, Akron.

Woman's Auxiliary Advisory Committee—Dr. Ralph L. Rutledge, Alliance, chairman; Dr. Carl Goehring, Steubenville; Dr. Barney J. Hein, Toledo.

MEDICAL SERVICE PLANS

The President, Dr. Paryzek, and the Executive Secretary reported on a meeting of the Committee on Medical Service Plans held in the State Headquarters Office, Columbus, Sunday, September 7, 1941. On **motion** by Dr. McNamee, seconded by Dr. Schriver and **carried**, the following recommendations of that committee were **approved:**

1. That the committee have authority to issue a handbook for distribution to officers and committees of county medical societies, such handbook to outline and suggest proper procedure for the study and initiation of a medical service plan under the Ohio Enabling Act.

2. That the officers and members of The Council and members of the Committee on Medical Service Plans be scheduled to attend meetings of all county medical societies at the earliest possible date to discuss the content of the proposed handbook and the question of medical service plans generally with the memberships of the various local societies.

3. That the State Association should not provide legal service for county medical societies engaged in the drafting of plans and of various legal documents to be used in the operation of such plans, but that the Committee on Medical Service Plans should have authority to engage competent legal counsel to be used by the committee in reviewing plans which may be submitted by local medical societies and to clarify questions of general state-wide scope.

CONSTITUTIONAL AMENDMENTS

The following report of the Judicial and Professional Relations Committee was **approved** by The Council, on **motion** by Dr. McNamee, seconded by Dr. Beer, and **carried:**

"During the past several months the Judicial and Professional Relations Committee has reviewed extensive proposed changes in the Constitution and By-Laws of the Montgomery County Medical Society.

"After considerable correspondence and after a conference, authorized by the Judicial and Professional Relations Committee, between the Executive Secretary and a committee of the Montgomery County Medical Society, an agreement was reached with respect to a series of proposed amendments to the Constitution and By-Laws of the Montgomery County Medical Society. A memorandum setting forth the agreements was prepared by the Executive Secretary and submitted to Dr. M. D. Prugh, president of the Montgomery County Medical Society and chairman of the Revision Committee of that society.

"Therefore, it is the recommendation of the

Judicial and Professional Relations Committee that The Council **approve** the proposed amendments to the Constitution and By-Laws of the Montgomery County Medical Society as set forth in that memorandum.

"It should be understood that this recommendation applies only to the agreed-upon amendments and not to any amendments which might be adopted subsequently by the Montgomery County Medical Society at the time the amendments now under consideration are presented to that society for official action. Should any changes be made, or any new amendments be adopted by the Montgomery County Medical Society, these should be submitted to the Judicial and Professional Relations Committee for review and recommendation to The Council."

A communication from the secretary of the Lorain County Medical Society, submitting suggested amendments to the constitution and bylaws of that society, was read and discussed. On **motion** by Dr. Goehring, seconded by Dr. Hogue and **carried**, the proposed amendments were referred to the Judicial and Professional Relations Committee for review.

POSTGRADUUATE PROGRAMS

On behalf of the Committee on Education, the Executive Secretary presented a report on a meeting of that committee held on Sunday, August 24, 1941, in Columbus. Reference was made to the Postgraduate Educational Supplement published in the October 1 issue of *The Ohio State Medical Journal.* On **motion** by Dr. Schriver, seconded by Dr. Burley and **carried**, the report of the committee was **approved**, including the arrangements which had been made for five postgraduate sessions in various parts of the state during the month of November. In approving the recommendations of the committee The Council agreed to the suggestion that a Sub-Committee on Regional Postgraduate Lectures not be appointed for 1941 inasmuch as arrangements already have been completed for the Fall meetings; and a second recommendation, that the present Sub-Committee on Public Health Education be reappointed.

MISCELLANEOUS BUSINESS

A communication from the Lorain County Medical Society regarding procedure for work certificates issued to youth of compulsory school age was discussed by The Council. On **motion** by Dr. Rutledge, seconded by Dr. Brindley and **carried**, the Executive Secretary was instructed to write to the Lorain County Medical Society quoting the statute and setting forth the opinion of the members of The Council on this matter.

Copy prepared by Mr. Aszling for a statement from the Ohio State Medical Association paying suitable tribute to the pharmacy profession, to be used in radio broadcasts during National Pharmacy Week, was **approved** by The Council on **motion** by Dr. Sherburne, seconded by Dr. Seiler and **carried.**

The Committee on Public Relations and Economics and the Sub-Committee on Legislation were instructed to cooperate with the American Medical Association in supporting, on behalf of the Ohio State Medical Association, proposed changes in the Internal Revenue Act, on **motion** by Dr. McNamee, seconded by Dr. Hogue and **carried.** The proposed amendments would modify those sections of the Internal Revenue Act which impose an inequitable burden on the estates of deceased professional men by permitting tax authorities to levy inheritance taxes on accounts receivable appearing on the books of the professional man at the time of his death, and which are uncollectible by the executor or administrator of his estate.

For the information of The Council attention was called to an article published in the October issue of *The Ohio State Medical Journal* pertaining to the curtailment of the health activities of the N.Y.A. in Ohio.

A communication from the American Society for the Control of Cancer, asking the Ohio State Medical Association to assist in educational activities in Ohio, was discussed. On **motion** by Dr. McNamee, seconded by Dr. Schriver and **carried**, the Executive Secretary was instructed to acknowledge the letter stating that the Sub-Committee on Public Health Education and The Council, as in the past, would cooperate in every possible way in cancer education activities carried on by the American Society for the Control of Cancer and the Women's Field Army of Ohio. Members of The Council expressed themselves as believing that it would be unnecessary to establish a new committee or to appoint district chairmen to handle this activity.

A question relating to the fee schedule of the State Industrial Commission, presented by Dr. Hogue, was referred to the Sub-Committee on Workmen's Compensation.

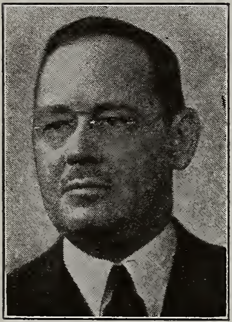
Attest: CHARLES S. NELSON,
Executive Secretary.

Many Attend Fifth District Session

The joint Fifth Councilor District meeting of the Ohio State Medical Association and the Wm. E. Lower Lecture of the Cleveland Academy of Medicine, held at the Medical Library Auditorium, Cleveland, October 9, attracted approximately 300 physicians to the afternoon session and 500 in the evening. Greetings from the State Association were extended by Dr. Harry V. Paryzek, the President. Dr. Chester S. Keefer, Wade professor of medicine, Boston University School of Medicine, Boston, Mass., spoke on "The Clinical Use of Sulphonamide Drugs," and "Toxic Manifestations of the Sulphonamide Drugs." The Lower lecturer was E. O. Lawrence, Ph.D., professor of physics, University of California, Berkeley, California, who discussed "The Newer Physics in Medicine."

Complete Programs for Postgraduate Days to Be Held In Five Centers by State Association In November

Chas. W. Pavey, M.D.



C. C. Sherburne, M.D.

A. Carlton Ernstene, M.D.

Chas. T. Way, M.D.

THE Ohio State Medical Association's Five-Year Postgraduate Lecture Program will be resumed during the first two weeks of November when "Postgraduate Days" will be presented by the Committee on Education at McConnelsville, Dennison, Ashland, Springfield and Piketon.

Varying the program somewhat from the previous three years, the course this Fall is concentrated into a one-day session, beginning at 2 P.M. There will be three 45-minute talks in the afternoon, dinner, and two 45-minute talks in the evening, beginning at 7:30 o'clock. A 15-minute question-and-answer period will follow each talk.

The Committee selected the lecturers for their speaking ability and clinical experience. Many of them have appeared before on the postgraduate course. Physicians who attend the meetings can count on hearing forceful and practical discussions by men who can speak authoritatively on the subjects assigned to them. All of them will welcome questions from the floor.

Arrangements have been made by local chairmen for a dinner at nominal cost. Members of the Association in the vicinity of the centers have received a notice of the meeting. They will also receive a reminder about a week prior to the session. The work of local chairmen in arranging for the dinner will be greatly facilitated if members will return reservation cards promptly.

All members of the State Association are cordially invited and urged to attend one of these postgraduate sessions. There will be no registration fee.

Accompanying this article are photographs of 16 of the 17 lecturers. Details of the program for each of the sessions follow:

McCONNELSVILLE—WEDNESDAY, NOV. 5

High School

Dr. C. E. Northrup, Local Chairman

Program

2:00 P.M.—**Control of Obstetrical Hazards**, Dr. Chas. W. Pavey, Columbus, assistant professor of obstetrics, Ohio State University College of Medicine.

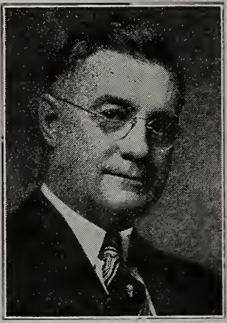
3:00 P.M.—**Treatment of Nephritis in Childhood**, Dr. James G. Kramer, Akron, visiting pediatrician, Children's Hospital and St. Thomas Hospital.

4:00 P.M.—Intermission.

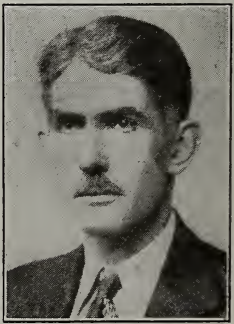
4:15 P.M.—**Modern Treatment of Burns**, Dr. Arnold F. Sydow, Cleveland, visiting surgeon, St. Luke's Hospital, in charge of children's, plastic, and maxillofacial surgery.

James G. Kramer, M.D.

William B. Bean, M.D.



Earl H. Baxter, M.D.



Dana W. Cox, M.D.

D. M. Glover, M.D.

Jonathan Forman, M.D.

J. M. Hayman, Jr., M.D.

Sterling H. Ashmun, M.D.

6:00 P.M.—Dinner.

7:30 P.M.—Chemotherapy Today, Dr. C. C. Sherburne, Columbus, instructor in medicine, Ohio State University College of Medicine.

8:30 P.M.—Deficiency Diseases Seen as Complications of Common Medical Conditions, Dr. Wm. B. Bean, Cincinnati, assistant professor of medicine, University of Cincinnati College of Medicine.

DENNISON—THURSDAY, NOV. 6

High School
(Dinner at Catholic Church Hall)

Dr. R. E. Wolf, Local Chairman

Program

2:00 P.M.—Chemotherapy Today, Dr. A. Carlton Ernstene, Cleveland, department of medicine, Cleveland Clinic.

3:00 P.M.—Deficiency Diseases Seen as Complications of Common Medical Conditions, Dr. Wm. B. Bean, Cincinnati, assistant professor of medicine, University of Cincinnati College of Medicine.

4:00 P.M.—Intermission.

4:15 P.M.—Modern Treatment of Burns, Dr. Arnold F. Sydow, Cleveland, visiting surgeon, St. Luke's Hospital, in charge of children's, plastic, and maxillofacial surgery.

6:00 P.M.—Dinner.

7:30 P.M.—Control of Obstetrical Hazards, Dr. H. P. Taylor, Cleveland, former chairman, Section on Obstetrics and Gynecology, Ohio State Medical Association.

8:30 P.M.—Treatment of Nephritis in Childhood, Dr. Earl H. Baxter, Columbus, professor of pediatrics, Ohio State University College of Medicine.

ASHLAND—FRIDAY, NOV. 7

Ashland Country Club

Dr. L. H. Martin, Local Chairman

Program

2:00 P.M.—Control of Obstetrical Hazards, Dr. Dana W. Cox, Columbus, instructor in obstetrics, Ohio State University College of Medicine.

3:00 P.M.—Chemotherapy Today, Dr. Chas. T. Way, Cleveland, director of medicine, St. Luke's Hospital.

4:00 P.M.—Intermission.

4:15 P.M.—Modern Treatment of Burns, Dr. D. M. Glover, Cleveland, director of surgery, St. Luke's Hospital.

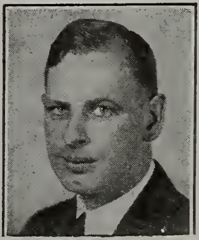
6:00 P.M.—Dinner.

7:30 P.M.—Treatment of Nephritis in Childhood, Dr. Spencer A. Wahl, Cleveland, instructor

Spencer A. Wahl, M.D.

Martin W. Diethelm, M.D.

H. M. Clodfelter, M.D.



Howard P. Taylor, M.D.

in pediatrics, Western Reserve University School of Medicine.

8:30 P.M.—**Deficiency Diseases Seen as Complications of Common Medical Conditions,** Dr. Jonathan Forman, Columbus, physician-member, Ohio State Committee on Nutrition for Defense.

SPRINGFIELD—WEDNESDAY, NOV. 12

Shawnee Hotel

Dr. G. M. Lane, Local Chairman

Program

2:00 P.M.—**Control of Obstetrical Hazards,** Dr. Martin W. Diethelm, Toledo, senior obstetrician, St. Vincent's and Lucas County Hospitals.

3:00 P.M.—**Chemotherapy Today,** Dr. J. M. Hayman, Jr., Cleveland, professor of clinical medicine and therapeutics, Western Reserve University School of Medicine.

4:00 P.M.—**Intermission.**

4:15 P.M.—**Modern Treatment of Burns,** Dr. D. M. Glover, Cleveland, director of surgery, St. Luke's Hospital.

6:00 P.M.—**Dinner.**

7:30 P.M.—**Treatment of Nephritis in Childhood,** Dr. Earl H. Baxter, Columbus, professor of pediatrics, Ohio State University College of Medicine.

8:30 P.M.—**Deficiency Diseases Seen as Complications of Common Medical Conditions,** Dr. Wm. B. Bean, Cincinnati, assistant professor of medicine, University of Cincinnati College of Medicine.

PIKETON—THURSDAY, NOV. 13

Opera House

(Dinner at Lake White Club)

Dr. I. P. Seiler, Local Chairman

Program

2:00 P.M.—**Control of Obstetrical Hazards,** Dr. Chas. W. Pavey, Columbus, assistant professor of obstetrics, Ohio State University College of Medicine.

3:00 P.M.—**Chemotherapy Today,** Dr. H. M. Clodfelter, Columbus, instructor in medicine, Ohio State University College of Medicine.

4:00 P.M.—**Intermission.**

4:15 P.M.—**Modern Treatment of Burns,** Dr. D. M. Glover, Cleveland, director of surgery, St. Luke's Hospital.

6:00 P.M.—**Dinner.**

7:30 P.M.—**Treatment of Nephritis in Childhood,** Dr. S. H. Ashmun, Dayton, chairman, Ohio Section, American Academy of Pediatrics.

8:30 P.M.—**Deficiency Diseases Seen as Complications of Common Medical Conditions,** Dr. Wm. B. Bean, Cincinnati, assistant professor of medicine, University of Cincinnati College of Medicine.

Ohio NYA To Resume Its Health Program On a Limited Basis

In the October issue of *The Journal*, page 990, there appeared an article regarding the curtailment of the health program of the National Youth Administration of Ohio because of a reduction in the amount of money allotted to Ohio for administrative activities.

During the past several weeks, Ohio officials of the NYA have been able to make certain readjustments which will enable the NYA to resume its Ohio health program in a limited way.

A reduction will be made in the number of areas of the NYA in Ohio from eight to six, according to Leo B. Jacobs, state administrator. A health supervisor will be provided for each of the six districts. Dr. Carl A. Wilzbach, health commissioner of Cincinnati and a member of the Committee on Education of the Ohio State Medical Association, will continue to serve as state health consultant. Use will be made in a limited way of the physicians who had been engaged in the various counties on a per diem basis to make physical examinations of NYA youth.

However, a large physical examination program will not be resumed for the time being, according to Mr. Frank J. Blazina, director of the Youth Personnel Division of the Ohio NYA, who will be in charge of the health program. For the present, Mr. Blazina states, those who will be given physical examinations fall into three classifications: (1) Those scheduled to go to camps and resident centers; (2) those with obvious physical defects; (3) those receiving shop training for subsequent employment in national defense industries.

"In resuming the health program", Mr. Jacobs said, "we are making a very modest beginning, but as more administrative funds accrue, we plan to use them for the employment of per diem doctors to conduct physical examinations in the areas. Before we were forced to curtail the program so drastically, we had completed 9,148 examinations."

Prize of $300 Offered for Best Essay

The American Association for the Study of Goiter again offers the Van Meter Prize Award of $300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The award will be made at the annual meeting of the association which will be held at Atlanta, Ga., June 1-3, 1942. providing essays of sufficient merit are presented in competition.

The competing essays may cover either clinical or research investigations; should not exceed 3,000 words in length; must be presented in English; and a typewritten, double spaced copy sent to the corresponding secretary, Dr. T. C. Davison, 478 Peachtree Street, Atlanta, not later than April 1.

Plan to Rehabilitate Men Rejected by Army Because of Physical Defects Announced; Ohio Officials Await Instructions as to How Program Will Operate

As this issue of *The Journal* went to press, Ohio Selective Service Headquarters was without detailed instructions as to its duties in putting into effect in Ohio a program for the rehabilitation of registrants under the Selective Service Law "found to have remediable defects and who as a result of such treatment will be made available for general military service".

On October 10 the press carried articles concerning the announcement of the rehabilitation program by President Roosevelt and General Hershey, National Director, Selective Service System. On the same day, an official communication from General Hershey was received by State Selective Service Headquarters stating that the Selective Service System would be "charged with the administration" of the program and that "the remedy will be provided by physicians and dentists of the locality in which the registrant resides and compensation will be paid from Federal funds to be made available for such purpose".

Both Mr. Roosevelt and General Hershey stated that approximately 900,000 men had been rejected by local draft boards or Army examiners because of mental or physical defects. They indicated that a careful analysis had convinced the National Selective Service System that about 25 per cent of the rejected group, or approximately 200,000 men, could be made fit for general military service through the application of remediable measures. The rehabilitation program would provide the ways and means of bringing this about, they said.

MAIN CAUSES OF REJECTIONS

A press release on the same day quoted Colonel Leonard G. Rowntree, chief of the Medical Division, National Selective Service System, as having stated that Selective Service and Army records reveal that the principal cause for rejection of registrants is defective teeth, this cause accounting for 20.9 per cent of rejections. Other major disqualification causes, according to Colonel Rowntree, are: Eyes, 13.7 per cent; cardiovascular ailments, 10.6 per cent; venereal diseases, 6.3 per cent; musculo-skeletal defects, 6.8 per cent; mental and nervous defects, 6.3 per cent; hernia, 6.2 per cent; ear defects, 4.6 per cent; feet defects, 4.0 per cent; lungs, including tuberculosis, 2.9 per cent; and miscellaneous defects, 17.7 per cent.

It is difficult to estimate how many Ohio men are potential beneficiaries of the proposed rehabilitation program. At present there are approximately 28,000 Ohio registrants in Class 1B "available for limited military service" but not acceptable for general military service because of physical or mental disabilities. A total of approximately 22,000 men have been placed in a 4F classification, "physically, mentally or morally unfit" for general military service. Selective Service officials believe that few, if any, of the Class 4F men could be made available for active military service through remediable measures. Therefore, it may be assumed that the 28,000 Class 1B men would constitute the principal group affected by the rehabilitation program. Applying the estimate made by National Selective Service Headquarters that approximately 25 per cent of those rejected can be salvaged" it would appear that approximately 7,000 men in Ohio might be rehabilitated for general military service. Of course, if the percentage were to be applied to the total group of men rejected (both 1B and 4F men), the total of potential rehabilitees would be approximately 12,000. Providing the statistics on causes of rejection are accurate, about 20 per cent of those in the rehabilitation classification would require dental services.

NEED MORE DATA

As yet Ohio Selective Service Headquarters has no data as to what percentage of the defects for which the approximately 50,000 Ohio men were rejected, could be corrected to such an extent that the men would be fit for general military service. At present an analysis is being made of the physical examination records of men rejected by two Ohio draft boards—one a city board, the other a rural board—in an effort to obtain data which can be used as a measuring stick for other parts of the state.

The rehabilitation program for rejected Selective Service registrants has many ramifications. As already pointed out, how the program will operate has not been determined—at least no announcement on this has been made to date by official sources. Many reasons have been advanced pro and con as to why about half of the registrants examined have been found physically or mentally unfit for general military service. The announcement of the rehabilitation program has caused those who have been advocating a "national health program" to renew their efforts, the Selective Service figures being used by them as ammunition for extension of governmental health and medical programs.

An interesting round-up story on the rehabilitation program and its related phases was published in the October 17 issue of *The United States News*, a weekly magazine devoted to "reporting, interpreting and forecasting the news of national affairs". The article reveals some of the attitudes in official and unofficial quarters in Washington on the controversial national health situation. Following are excerpts from the article:

"Half the nation's men are unfit to be soldiers. This discovery by examiners of the Selective Service System is causing President Roosevelt to take action to improve the state of the nation's health. Concern is heightened by the fact that draft rejections take place among men who should form the healthiest part of the population—those between the ages of 21 and 35.

"The Selective Service report submitted to the President reveals that, of 2,000,000 men called in the draft, 1,000,000 were found to be unfit for military service. Of those rejected, 900,000 were found to be in poor health, while 100,000 lacked sufficient education.

"The President's first goal is to restore the health of those young men who can be cured quickly and become eligible for training under the Selective Service Act. Selective Service officials believe that 200,000 rejected men fall in this class. For this group, the President is recommending a compulsory 'salvage' program.

GOVERNMENT TO PAY COSTS

"Local draft boards are being instructed to place men turned down for curable defects in special categories. These persons will be visited by traveling boards of specialists who, after examination, may recommend cases for immediate treatment. Treatment will be provided by personal physicians, dentists or surgeons in local communities, and costs will be defrayed by the Federal Government. Unfit men unwilling to be salvaged, the President suggests, could be inducted into the Army and compelled to take treatment.

"This means that young men suffering from minor ailments will have no choice in the matter of receiving treatment. Among the 200,000 curables are persons suffering principally from bad teeth, venereal disease, hernia, and minor defects of the eye, ear, nose and throat.

"The salvage program, however, is to form only the first step in a broader public health program. The President expressed the opinion that draft statistics presented a fair picture of the general state of the nation's health, and he is planning a more rounded, long-term program to treat this problem.

"Medical records indicate that the health of the nation is not much different than it was 24 years ago, when 31 per cent of the men called for examination in the first World War were rejected for physical causes. Records of the last war and the present, however, cannot be compared too closely.

"In the first place, the age groups are different, and the doctors expect to find a higher percentage of defects among older persons. The World War draft called men from 21 to 30, whereas current records include men between 21 and 35. Inclusion of the older men is believed to have had some bearing on the fact that defects occur in almost half of the cases examined, contrasted with the World War's 31 per cent.

"This opinion is strengthened by a special New York City study, which shows that 58.64 per cent of men between 18 and 25 were accepted, while only 35.91 per cent of the men between the ages of 31 and 35 were found fit for full military duty. The fact that younger groups are healthier is likely to result in fewer rejections in the future, since the upper age limit for selected men now is 28 years.

"Another reason for a larger percentage of rejections under the present system is found in higher physical standings and improved diagnosis. Eyesight requirements are more stringent today than they were 24 years ago, and draft boards are believed to be turning down more men for bad teeth. Improved methods of diagnosis also reveal almost all cases of tuberculosis and venereal disease that are present.

MANY PLANS PROPOSED

"Use of CCC camps as health centers, proposed in a bill by Representative Scrugham (Dem.), of Nevada, apparently has not met with White House favor. Basis of this proposal is the report of CCC Director James J. McEntee that enrollment in camps will shrink to 160,000 by the end of October.

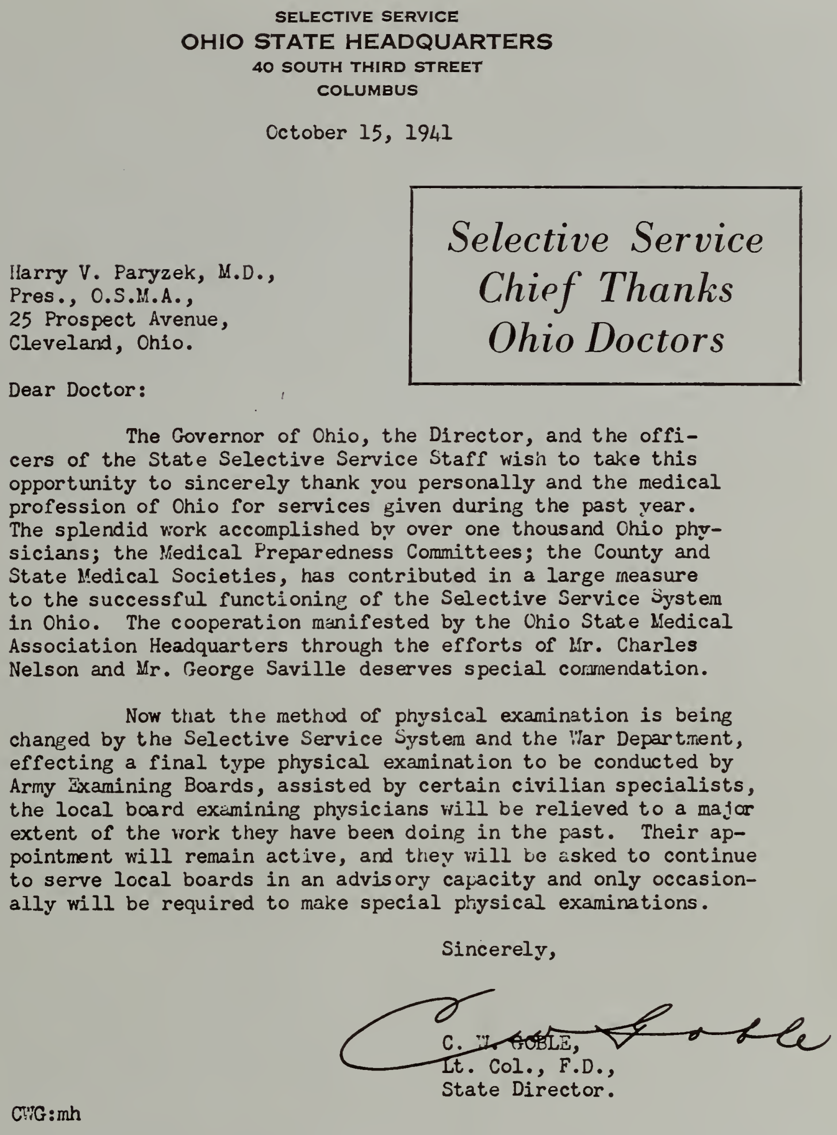
"At one time these camps provided employment for 500,000 young men, and the Nevada Representative suggests that CCC facilities readily could be adapted to a rehabilitation program. A similar proposal from the Army, however, was rejected by the President.

"The Army's alternative program called for the induction of the unfit who could readily be cured. These men then would be treated in Army medical services. The President objects to this proposal on the ground of cost. Besides costs of medical care, he pointed out, this program also would involve costs of housing, food, clothing and Army pay. The total expense is estimated at $500,000,000. The President believes the salvage program will operate as efficiently for far less money.

"Problems of providing medical service for rejected men, however, are scarcely touched by the salvage program, which promises treatment to less than 25 per cent. As a result, public health authorities, medical organizations and service groups, such as the Red Cross, are studying methods of offering a broader program.

"Federal Security Administrator Paul V. McNutt often has spoken in favor of a nationwide health program and his aides are studying draft

Selective Service Chief Thanks Ohio Doctors



SELECTIVE SERVICE
OHIO STATE HEADQUARTERS
40 SOUTH THIRD STREET
COLUMBUS

October 15, 1941

Harry V. Paryzek, M.D.,
Pres., O.S.M.A.,
25 Prospect Avenue,
Cleveland, Ohio.

Dear Doctor:

The Governor of Ohio, the Director, and the officers of the State Selective Service Staff wish to take this opportunity to sincerely thank you personally and the medical profession of Ohio for services given during the past year. The splendid work accomplished by over one thousand Ohio physicians; the Medical Preparedness Committees; the County and State Medical Societies, has contributed in a large measure to the successful functioning of the Selective Service System in Ohio. The cooperation manifested by the Ohio State Medical Association Headquarters through the efforts of Mr. Charles Nelson and Mr. George Saville deserves special commendation.

Now that the method of physical examination is being changed by the Selective Service System and the War Department, effecting a final type physical examination to be conducted by Army Examining Boards, assisted by certain civilian specialists, the local board examining physicians will be relieved to a major extent of the work they have been doing in the past. Their appointment will remain active, and they will be asked to continue to serve local boards in an advisory capacity and only occasionally will be required to make special physical examinations.

Sincerely,

C W Goble

C. W. GOBLE,
Lt. Col., F.D.,
State Director.

CWG:mh

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figures as a basis of providing one. The President also has suggested that draft disclosures appear to call for the cooperation of States, counties and cities in planning an adequate program both for the treatment of defectives and the prevention of disease.

PRESSURE FOR HEALTH INSURANCE

"A national health program, financed largely from federal funds, is being increasingly advocated and the high percentage of draft rejections is adding arguments to this viewpoint. Many public health authorities contend that draft statistics reveal the problem as a national one, too large to be treated adequately either by individual or local government action.

"The fact that 900,000 prospective soldiers had to be rejected is viewed as an indication that millions more require equal attention. A healthy working population is held to be as important as a healthy Army, and the fact that 400,000,000 working days are lost each year because of illness is viewed as a problem that the Federal Government can ill afford to neglect, either now or in the future.

"Ammunition for compulsory health insurance thus is being provided by draft examinations. The American Association for Social Security already has drafted a model health insurance bill. This organization has long contended that private medical care is providing inadequate health protection for the population, and urges that insurance contributions, plus federal subsidies, should be used. The number of draft rejections is being cited as proof of the failure of voluntary plans to solve the health problem.

"Cost of a national health insurance system probably would be more than $2,000,000,000 a year. If supported by pay-roll taxes, as other parts of the Social Security system are supported, the program would require extremely heavy levies. For this reason, many officials doubt that compulsory health insurance will be adopted in the present emergency.

PREVENTIVE WORK BENEFICIAL

"Methods of preventing disease as well as treating ailments also are highlighted by Selective Service records. Reports show, for example, that fewer men are being turned down for tuberculosis now than during the World War, despite the fact that modern diagnosis would be likely to reveal more care of this disease. Much credit for this record is given to efforts exerted in the last 20 years in treating and preventing tuberculosis.

"Recent medical discoveries indicate, moreover, that improper diet is at the root of much illness. The influence of a wide range of vitamins on general health conditions is recognized, and federal officials are in the vanguard of advocates of a better national nutrition program.

"Advocates of a national nutrition program couple Selective Service records with data compiled by the Department of Agriculture, showing that thousands of families have inadequate diets, to argue that the health of future generations can best be protected by proper nutrition from infancy to adulthood.

"Public health authorities also are using draft statistics in arguing that the nation has failed to apply medical and hygienic developments of recent years. They hope that the public will awake to the fact that much illness can be cured and more prevented if medical knowledge is transferred from laboratories into average homes."

One-Physical-Examination Plan Extended by Selective Service To the Entire State

ON November 1 the one-physical-examination plan which was started by State Selective Service Headquarters on an experimental basis in several areas last July, became effective throughout the state as a whole.

The basic concept of this plan is to have registrants under the Selective Service Law submit to one physical examination given by a board of Army medical officers, assisted by civilian specialists where necessary, prior to induction. The original plan called for an examination by physicians attached to a local draft board and a second examination at an induction center.

The one-examination plan was tried out first in Northwestern Ohio. Later it was used on a trial basis in Northeastern Ohio. Now it will become the uniform procedure in the entire state. However, Colonel H. E. Boucher, chief medical officer, Ohio Selective Service, points out that it may be impossible to put the new plan into operation in all counties immediately but that in the very near future the entire state will be affected.

In a special bulletin on this matter, State Selective Service emphasized the following instructions to local draft boards:

"The appointment of examining physicians to local boards and medical advisory boards will remain active. They will continue to function in an advisory capacity to the local boards, and in an occasional case, such as transfer for examination, may be required to make complete physical examinations."

For the purpose of conducting the single examination of registrants, the following examination stations for the counties enumerated have been designated:

Cleveland—Central Armory, Sixth Street and Lakeside Avenue; counties—Ashland, Ashtabula, Geauga, Lake, Lorain, Medina, Cuyahoga, Portage, Summit and Trumbull.

Toledo—Wall Street Armory, 965 Wall Street; counties—Auglaize, Allen, Defiance, Erie, Fulton, Hancock, Henry, Huron, Lucas, Ottawa, Paulding, Putnam, Sandusky, Seneca, Van Wert, Williams and Wood.

Columbus—Fort Hayes, 530 Buckingham St.; counties—Wyandot, Crawford, Richland, Knox, Morrow, Marion, Hardin, Logan, Union, Delaware, Licking, Franklin, Madison, Fayette, Pickaway, Ross, Fairfield, Hocking and Vinton.

Zanesville—Natl. Guard Armory, 814 Elberon Ave.; counties—Muskingum, Coshocton, Guernsey, Noble, Morgan and Perry.

Canton—Eagles' Hall, 6th & Market St., S.; counties—Wayne, Stark, Mahoning, Carroll, Columbiana, Tuscarawas and Holmes.

Wheeling, W. Va.—(Place undetermined); counties—Jefferson, Harrison, Belmont and Monroe.

Parkersburg, W. Va.—(Place undetermined); counties—Washington, Athens and Meigs.

Huntington, W. Va.—Natl. Guard Armory, 1st St.-5th Ave.; counties—Gallia, Lawrence, Jackson, Scioto and Pike.

Dayton—Memorial Hall, 125 1st Street; counties—Mercer, Darke, Shelby, Miami, Clark, Champaign, Greene, Montgomery and Preble.

Fort Thomas, Ky.—Counties—Hamilton, Butler, Warren, Clinton, Highland, Adams, Brown and Clermont.

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Handbook on Medical Service Plans Issued To County Societies

In mid-October the Committee on Medical Service Plans of the Ohio State Medical Association distributed copies of a "Medical Service Plans Handbook" to the presidents and secretaries of all component county medical societies.

The purpose of this handbook, the issuance of which was authorized by The Council, is twofold: (1) To present recommendations to component medical societies as to how to proceed with the organization of a medical care plan under the provisions of the Ohio Enabling Act, enacted by the Ohio General Assembly last May and (2) to provide data which may be useful to local societies in their deliberations.

At the outset the handbook suggests that each component society select a committee to study this question and analyze local needs for a voluntary non-profit medical service plan. Most of the handbook is devoted to suggestions as to how the local committee should operate.

Obviously, this is only the first step in efforts to put the provisions of the Enabling Act to work. Nevertheless, it is a beginning, and the handbook should prove of substantial help to societies which have expressed a willingness to explore the possibilities of medical service plans to meet local needs but have been somewhat at a loss as to just how to start the ball rolling. It should stimulate thinking on the part of the memberships of many county medical societies. If sufficient thought is given to the subject, action is quite likely to follow.

That this is one of the most important questions before the medical profession of Ohio at this time seems quite apparent. The first chapter of the handbook carries the following heading: "Need for Medical Service Plans Unchanged by Temporary Economic Pickup; Now Is the Time for Planning, Preparation and Action."

Commenting on this aspect of the subject, the handbook states:

"**The problem of finding a safe and sane method of improving the distribution of modern medical care to those of modest means still is before the medical profession.**

"There has been a temporary improvement in economic and employment conditions, it is true, due to the national defense program. Nevertheless, the present-day synthetic situation has not produced a permanent solution to the underlying problem of making medical care more easily available to those of the low-income group.

"Moreover, the apparent lull in organized movements to bring about a program of government-controlled medical care for low wage earners and those of the white collar group should not be interpreted to mean that this is a dead issue. On the contrary, **there are many indications that the national defense program is being used by some as a subtle way of attaining this objective under the guise of military preparedness.**

"The medical profession and others who have been actively interested in trying to find a solution of the medical problems of those of modest means should not be misled. They should not permit themselves to be tricked into taking a do-nothing attitude. This is not the time for inertia and complacency.

"Today's improvement in employment and the advent of better times must be regarded as temporary. In fact, neither the white collar man nor the small wage earner is better prepared today to meet the medical problems of himself and his family than he was a year ago or two years ago because of the rapid rise in the cost of living which has accompanied the business pick-up under the defense program.

"**It would be tragic for the medical profession to let itself be fooled by today's paradoxical situation.** None should be foolish enough to believe that the need for voluntary prepayment medical care plans has disappeared and that the solution to the low wage earner's medical problems has been found.

"The old saw about the folly of the man who neglected in fair weather to fix his leaky roof is applicable to present-day conditions in the field of medical economics. **Now is the time for the medical profession to think about and prepare for the future—a future which is likely to produce hardships and new problems for all, including the medical profession.** This is the time for the production of sound ways of meeting anticipated needs and conditions. Tomorrow, next month, next year may be too late.

"The Committee on Medical Service Plans of the Ohio State Medical Association is convinced:

"1. **That** there is as great need today as at any time in the past for an active attempt by the medical profession to develop sound methods to make the benefits of good medical care more readily available to those who find it difficult to take advantage of such benefits under even normal economic conditions.

"2. **That** the threat of government control of medical services and regimentation of the medical profession is, if anything, more pronounced today than ever before, because of increasing concentration of authority and activity in governmental agencies.

"3. That it is more important now than ever before for the medical profession to take the initiative in efforts to bring about sound readjustments and lasting improvements in the distribution of medical care.

"4. That a real beginning has been made in Ohio through the enactment of enabling legislation whereby the medical profession and the people can work together to solve certain current medical problems without changing the American system of medical practice.

"5. That the public is looking to the medical profession of Ohio for leadership in the establishment of one or several medical care plans as authorized by the Enabling Act if for no other reason than to prove or disprove that this is a sound approach to the solution of an existing health problem.

"6. That this challenge and this opportunity must not be disregarded by the medical profession of Ohio.

"7. That each component medical society should give serious thought to this question as it applies to the local community; analyze the needs and sentiment of the community; determine the feasibility of establishing a medical service plan there and take concrete action toward such an end if the facts warrant such action."

It is the hope of The Council and the Committee on Medical Service Plans that each county medical society will discuss the content of the handbook at an early society meeting and that each society will name a working committee. Supplemental information which will be helpful to such local committees will be supplied from time to time by the committee of the State Association. Members of The Council and the Committee on Medical Service Plans are prepared to visit county medical societies to discuss this subject. The object of such visits will not be to try to force any county medical society to do anything in this field but merely to stimulate thinking and consideration. After it has a knowledge of the national picture so far as medicine is concerned and complete information on its local situation, each county medical society will have to judge for itself whether local efforts to establish some kind of medical care plan for the low-income group should be set in motion.

The public looks to the physicians as leaders in things pertaining to health, and it will accept our judgment as the final word in health matters if we are ready with practical and sound material when such advice is sought. We had better produce.—Bulletin of The Columbus Academy of Medicine.

Plan Now To Attend One of the November Postgraduate Sessions

Elsewhere in this issue will be found complete details regarding a postgraduate session to be presented by the Ohio State Medical Association in five areas of the state on November 5, 6, 7, 12 and 13.

Any member of the State Association is privileged to attend any of these sessions. There will be no registration fee. Timely subjects will be discussed by hand-picked clinicians.

We realize that physicians are busier now than they have been for years and that there is keen competition between various groups for the time of the average physician. Nevertheless, we believe that this postgraduate opportunity offered by the State Medical Association is one which no member can afford to pass up. To prepare himself to keep abreast with the science of medicine, today's practitioner must study and observe. Postgraduate sessions offer one practical way for the busy physician to learn about progress being made in medical research and how the findings of the medical scientists may be applied.

Plan now to attend one of the November meetings!

Medicine is, so far as we know, the only profession that is actively and energetically working day and night to reduce, or even to abolish, the need for its own services.—Westchester Medical Bulletin.

"Of Whom Does This Remind You?"

Did you ever read "Theory of the Leisure Class" written in 1899 by Thorstein Veblen? One reader of *The Journal* has because recently he submitted an excerpt from "Theory of the Leisure Class", with the following heading penciled on it: "Of Whom Does This Remind You?" We're not going to answer the query—we'll leave that to you, Mr. Reader. Read the excerpt and draw your own conclusions:

"The chances for a survival and transmission of atavistic traits are greatest in those classes that are most sheltered from the stress of circumstances. The leisure class is in some degree sheltered from the stress of the industrial situation, and should, therefore, afford an exceptionally great proportion of reversions to the peaceable or savage temperament. It should be possible for such aberrant or atavistic individuals to unfold their life activity on ante-predatory lines without suffering as prompt a repression or elimination as in the lower walks of life.

"Something of the sort seems to be true in fact. There is, for instance, an appreciable proportion of the upper classes whose inclinations lead them into philanthropic work, and there is a considerable body of sentiment in the class going to support efforts of reform and amelioration. And much of this philanthropic and reformatory effort, moreover, bears the marks of that amiable 'cleverness' and incoherence that is characteristic of the primitive savage."

Science is a first-rate piece of furniture to adorn a man's upper chamber provided his lower floor is furnished with good common sense.—Oliver Wendell Holmes.

Role of the Medical Profession in Shaping Public Policy

Encouragement to the efforts being put forth by the medical profession through the Ohio State Medical Association and its component local societies to bring about a better understanding between the profession on one hand and the public on the other is voiced in a recent editorial appearing in the *Cincinnati Enquirer.*

Commenting on an address made by the incoming president of the Cincinnati Academy of Medicine, Dr. John H. Skavlem, the *Enquirer* offered these observations:

> "As problems of public health and welfare become more insistent, the responsibility of physicians for an active part in making the public policy is steadily greater. This was appropriately emphasized by Dr. John H. Skavlem in his inaugural statement as the incoming president of the Academy of Medicine. Despite the greater specialized interests of physicians, they would fall short of their full responsibility, Dr. Skavlem said, if they did not maintain a broad interest in community matters.
>
> "The Academy of Medicine formerly was a scientific body in the restricted sense of the term, a forum at which physicians exchanged their findings in the technical field they have in common. In more recent years, the academy has developed a new social usefulness, providing a channel by which the whole body of physicians in Cincinnati may exercise a real leadership in matters of public health.
>
> "Individual physicians are reluctant to commit themselves publicly on controversial matters of public policy, even when the public health is directly involved. Although understandable in the light of a firmly established professional tradition, this is a pity, nevertheless, for it deprives the public of the wise counsel of the medical profession in problems where the physician's judgment would be of special value.
>
> "It could properly be one of the primary objects of the academy just now to remedy this unnecessary and unfortunate gap between medical opinion and public policy. For we not only need the professional services of our physicians, but also their judgment and their energetic efforts on behalf of all those measures conducive to the public health."

To ninety-nine per cent of the foregoing editorial the answer of those members of the medical profession who have devoted considerable thought to the role of the profession in public affairs will be a loud "amen". The suggestion that physicians individually should commit themselves publicly on controversial issues involving public health is debatable. Such procedure certainly has its inherent dangers. Also, the comments of an individual physician on matters of public policy related to public health certainly would not carry as much weight as a pronouncement made by the medical profession as a unit, issued through the official channels of the local medical society. There can be no logical argument against the latter procedure—in fact it is exactly the policy which should be followed by the up-and-coming medical society; it is the only policy which will clarify issues, give the public the benefits of authoritative advice, and assure the medical profession of its proper role in the public affairs of the community. The public expects the medical profession to carry on a dignified public relations program. The profession should not muff this opportunity nor shirk its responsibilities in this respect.

Ohio's new premarital examination law may prove to be a popular statute if some folks who are keeping themselves in a stew thinking up bad things which "might" happen will pipe down and give the law a chance to get its feet on the ground.

Merchant's Woes Also Grief for the Physician

It has been noted that business and industrial leaders in various Ohio communities are planning conferences for the purpose of discussing the emergency which has arisen as a result of the enforcement of priorities regulations under the National Defense Program. Obviously, the purpose of these conferences will be to try to work out plans which will prevent if possible the closing of many small, local businesses, many of which are the real life-blood of many communities.

Unless he has devoted some serious thought to the present business situation, the physician may take the attitude that he, a professional man, should not be greatly concerned about the battle for existence being waged by numerous small concerns all over Ohio. This certainly is fallacious reasoning.

The physician indirectly is just as seriously involved as the factory owner, the store keeper and their employes. The profits, salaries and wages accruing from going business concerns are bread and butter for the physician as well as employers and employes of such concerns. This is a very simple and apparent fact which is too often disregarded by the professional man.

Therefore, in our opinion the medical profession must lend its support to local industrial and business groups in their efforts to find solutions for the serious problems confronting them in this time of crisis. Physicians, as individuals or as representatives of the local medical society, should take part in conferences which are held and should actively support efforts to meet local business emergencies. Professional men dare not stand aloof. They are just as much a part of the economic fabric of the community as the butcher, baker and candlestick maker. The physician must do his part to keep business alive and workers employed. Here is a splendid opportunity for real cooperation on the part of those interested in keeping their respective communities from becoming ghost towns and shattered relics of better days.

Our strength lies in our organization, but what avails our organization if the individual loses sight of his obligation to the organization and his fellows? Our young men as they come into the profession must be taught their responsibilities to the public, their fellows and themselves.—Lewis T. Buckman, M. D., President, Medical Society of the State of Pennsylvania.

Catholic Leaders Discuss Rural Medical Problems

A movement upon which Roman Catholic leaders are placing increasing importance was much in the news in October when clergy and laymen met in Jefferson City, Missouri, for the annual session of the National Catholic Rural Life Conference.

Notable at this conference was the unity which marked the thinking of those present. At previous conferences there had been many groups representing a divergence of interests. This year, however, all groups blended and realized the close relationship of the religious, social and economic questions.

Chief among the projects advocated by the speakers as a means of solving rural problems was **a cooperative system to carry medical aid to farm communities.** The conference was warned against dependence on government for a solution of major farm problems.

Why do we attach importance to this action? For the simple reason that when such a responsible and intelligent group as this begins to talk about cooperative plans for medical services in rural areas, it is high time for the physicians of Ohio and elsewhere in both urban and rural communities to give serious consideration to ways and means of meeting an apparent problem. Here in Ohio it seems urgent for the medical profession to give serious thought to implementing actively the Enabling Act for Medical Service Plans enacted at the last session of the Ohio Legislature. There is every possibility that if we do not provide producers' cooperatives, then consumers' cooperatives will be formed to hire physicians. All past experience proves that these "hired" men very soon lose their professional viewpoint. Perhaps Catholic leaders realize better than many within the medical profession that cooperatives of the right kind are the only means we have of staving off compulsory health insurance as a part of the national social security program.

It is time for the medical profession to quit quibbling about whether or not there is a need for readjustments in methods of distributing medical services, inasmuch as the need appears to be apparent, and to get down to brass tacks about doing something to provide the correct methods of meeting the situation.

Mrs. Roosevelt is active in urging the President to ask Congress for a program of health insurance.—"Washington Whispers," The United States News.

"Taking Over" By the Staff (This May Be No Dream)

The following by "R.J.F." appeared in the October issue of the Cleveland Academy of Medicine Bulletin and as the heading indicates, this may be no dream in the not distant future:

* * *

At the June meeting of the Petite Frey Hospital, the interest of the staff reached a new peak for the year 1943, when President Shorten Pithy called for the report of the Interne Committee. Committee member, Dr. Solvay Knott responded,

"Mr. President, members of the staff, in the absence of the committee chairman, Dr. Swett, I have been asked to submit the following report, which will call for action at this meeting. At present the interne situation is critical and in four months this hospital will have no internes for our two hundred patients. Our four internes now with us, are leaving, one each month.

"In July, Dr. Brysky goes to Poland.

"In August, Dr. George W. Moses Brown is assigned to an army camp in Georgia.

"In September, Dr. Max Heberling becomes resident at City Hospital.

"In October, Dr. MacGregor enlists in Canada.

"The staff must now determine the order in which we shall take over the work ordinarily performed by internes. Within four months each physician shall administer all the surgical and medical care for his private and staff cases. If the nursing shortage increases he will be fortunate to find hospital beds for his patients.

"Our committee has been in conference with our internes and now proposes the following order of 'taking over'.

"Beginning July first, all staff physicians shall be responsible for writing all progress notes, prescribing all evening sedatives, doing all surgical dressings and recording all blood pressures on patients over 35 years of age.

"Beginning August first, in addition to the aforementioned duties, the staff shall administer all hypodermoclysis, assist at transfusions, record physical examinations and write orders for the cathartics.

"Beginning September first, in addition, they shall attend to, or be directly responsible for, all night emergencies in a predetermined order by the junior staff, so that the overworked interne will not be unduly disturbed from his rest. Each physician shall perform his own emergency laboratory work.

"By October first, the various staffs shall provide their own surgical assistants for both private and staff cases. The staff members shall write out the histories, and describe all operations. In conclusion our committee requests that appropriate action be taken on this report."

As president Dr. Shorten Pithy arose from his chair to invite discussion of the situation, all eyes were turned to the door, by the commotion of Dr. Swett's hurried arrival. The committee chairman was invited to speak as he obviously desired to bring before the meeting a new communication which he held in his hand.

"President Pithy, and members, the proposals which were read to you by Dr. Knott, have now taken on a new importance. May I read this communication from the office of the Surgeon General at Washington. In paragraph three it states, 'Inasmuch as the nation is confronted with this special emergency, there will be no internes or residents allotted to the Petite Fry Hospital ten (10) days after the date of this letter. It is urged that your staff take over at once.'

"Speaking for the committee, I suggest that the provisions of the resolutions became effective immediately."

There is hardly anything in the world that some man cannot make a little worse and sell a little cheaper, and the people who consider price only are this man's lawful prey.—John Ruskin.

Medical Societies Should Aid Civilian Defense Program

As the international situation becomes more alarming, there is more and more talk about civilian defense. Hardly a day goes by without some reference in the newspapers about some phase of plans being formulated for home defense. Problems which must be met by every community during war are no longer theoretical.

Civilian defense activities in Ohio are being directed by the State Defense Council, appointed by Governor Bricker. Naturally, the state agency will have to function through local agencies set up especially for this particular purpose or through established organizations which are geared to handle such matters.

Health and medical problems are certain to arise. Therefore, Ohio is fortunate in that it has so many well-organized medical societies—organizations competent to assume responsibility in formulating and carrying on activities in that phase of civilian defense. Each county medical society must be prepared to serve when necessary. The preparedness committee of each society should be kept at full strength. It should keep in close touch with local civilian defense activities, offering to cooperate and planning to coordinate its work with that of other interested groups. The medical profession will be looked to for advice and help on programs designed to protect the civilian population and to meet anticipated community needs. It should not shirk this responsibility.

For the most part, American doctors are determinedly opposed to this drive for socialized medicine, and I must say I am with them all the way. State medicine, in my opinion, bears disaster for doctor and patient alike. You cannot pipe out medicine to the community as you do with steam heat.—Dr. A. J. Cronin, English author of "The Citadel."

Do You Want Cuts Made in Spending for Nondefense Items?

Recently several hundred business leaders from various parts of Ohio convened in Columbus for the purpose of discussing the serious question of taxation, especially from the standpoint of what can be done to bring about a real check on nondefense spending of local, state and national funds.

One of the principal speakers was the Hon. C. A. Woodrum, Virginia Congressman, a member of the Appropriations Committee of the national House of Representatives. Mr. Woodrum optimistically stated that he felt confident that many millions of dollars could be saved by curtailing nondefense activities and without injuring in any respect the public welfare. On the other hand, he pessimistically declared that little would be accomplished in this direction unless the people make more vigorous demands for curtailment.

Physicians, being people and taxpayers, should do a little skull practice on this subject. There are a good many people, including physicians, who haven't learned that one can't have his cake and eat it; that nothing is gained by robbing Peter to pay Paul.

It is a coincidence that shortly after the Columbus meeting referred to, the *New York State Medical Journal* published an editorial on this subject which offers some sound advice to physicians. It read in part as follows:

> "Of particular interest to the medical profession should be the new tax bill. It marks the beginning, in all probability, of a series of such tax bills, since at the present rate of spending the government is putting out about twice as much as

it is taking in. What the government is putting out falls into two categories: defense and nondefense spending. What we must spend for defense we must spend without stint. Control of such disbursements is no longer entirely within our power; it is dependent upon the event.

"But nondefense spending can be controlled. Congress can economize on nondefense expenditures. But what the Congress will do about this seems to depend upon what public opinion demands. With the public debt growing at the rate or ten billions or so a year, it should not be a matter of great difficulty to obtain a quite positive statement of public opinion on this matter. And we believe that such a statement would be favorable to a sharp decrease in nondefense spending.

"After all, no one will escape paying his share, and the contribution of physicians under this and subsequent tax bills will be considerable. The contributions of the physicians' patients will also run into money. There is thus established a new community of interest between doctor and patient which, for lack of a better term, we may call 'taxitis,' the symptoms of which seem to be an increasingly large hole in the pocketbook.

"There is no good reason why this matter of a reduction in nondefense spending should not be discussed by physician and patient with the end in view of recommending to Congress that something be done about it. It is certain that little or nothing will be done unless there is public protest.

"This journal is of the opinion that a congressional survey should be made and completed, as soon as possible, of the numerous items of nondefense spending which could be reduced or eliminated. We believe that such an inquiry would have the unqualified support of the physicians of the state. They are aware of the seriousness of the coming tax burden and are willing to assume their share of responsibility. We do not think, however, that they will, without protest, continue to carry a staggering load of taxation to support the continuance of numerous projects not related to the immediate necessities of national defense, where it can be demonstrated that they are no longer necessary, however much they may have been justified in a time of national depression that no longer exists. The time to start such an inquiry is now."

Do you want cuts made in spending for nondefense items? If you do, in our opinion, there are two things for you to do: First, don't get on the bandwagon for projects which can and should be shelved at this time; second, let members of Congress from Ohio know how you feel about it and get others to do likewise.

Ye Editor Speaks!

Recent addresses by Dr. Jonathan Forman, Editor of *The Journal*, include the following: October 8, Grandview Civic Welfare Club, "Improvement of Nutrition by Democratic Means"; October 14, Bellaire Kiwanis Club, "Your Nutrition and Defense"; October 14, Belmont County Medical Society, Bellaire, "Allergic Coryza"; October 14, St. Clairsville Women's Child Welfare League, "The Allergic Child"; October 7, Columbus, WBNS National Defense Meal Planning School, "The Central Ohio Nutrition for Defense Organization."

Membership in the Ohio State Medical Association reached a new all-time high—6,525—on October 20, compared with 6,394 on the same date in 1940. Included in the current membership are 263 members whose dues were waived because of military service. There were 6,475 members in the State Association on December 31, 1940, and 5,488 members on December 31, 1935.

State Association Exhibits Shown at Recent State Gatherings

Exhibits prepared by the State Association's Bureau of Public Education have recently been shown at a number of gatherings throughout the state. The Health Rhyme posters which were used in the Association's booth at the 1941 State Fair have subsequently been displayed as examples of health education material at the Mississippi Valley Conference on Tuberculosis, held in Columbus; the "Achievement Day" meeting of the Mahoning County Home Demonstration office, Youngstown; a teacher's conference sponsored by the Ohio Department of Education held in Columbus, and the annual meeting of the Ohio Congress of Parents and Teachers, also held in Columbus. It is intended to continue showing these posters on request. Several tentative agreements have been made by teachers and others interested.

The inter-relationship between the county medical society and community agencies interested in health and welfare is stressed in another exhibit entitled "How To Gear Your Community for Better Health". This exhibit was first shown at the meeting of the National Federation of Church Women, held in Columbus, and later was displayed in Akron at the joint meeting of the Ohio Welfare Conference and the Governor's Committee on the Follow-Up of the White House Conference. It was also exhibited at the annual meeting of the Ohio Congress of Parents and Teachers.

At the Akron meeting and the Mississippi Valley Conference on Tuberculosis supplementary exhibit material emphasizing the physician's role as a health educator was used. This material was borrowed from the American Medical Association.

Open Offices

Physicians who have recently opened new offices in Ohio include the following: Dr. Charles H. Cronick, Dr. Morrison Belmont, Youngstown; Dr. Charles R. Baber, Dr. Blanche Montgomery Meyer, Columbus; Dr. Lewis J. Gumper, Sidney; Dr. George W. Keil, Black Lick; Dr. C. J. Harner, Washington C. H.; Dr. G. L. McCullough, Mechanicsburg.

Physician's Legal Liability in Revealing Premarital Examination Findings to Third Person Discussed

IN the October, 1941, issue of *The Journal* there appeared on pages 994 and 995 a discussion of a physician's legal responsibilities under the Ohio premarital examination law. Five points were discussed. Definite conclusions were drawn regarding the first four points. No attempt was made to draw a definite conclusion about Point 5 which pertained to the legal duties and liabilities of a physician who finds while examining an applicant for a marriage license that the applicant is free from syphilis but does have some physical or mental disability or abnormality which would render the applicant unfit for marriage or would make impossible the consummation of a satisfactory marriage relationship.

Believing this presented an interesting and important problem for the physician in his everyday practice, involving many angles of the whole question of privileged and confidential communications, the Ohio State Medical Association requested an opinion from the Bureau of Legal Medicine and Legislation of the American Medical Association.

A. M. A. BUREAU COMMENTS

Complying with this request, the Bureau of Legal Medicine and Legislation of the A.M.A. prepared a lengthy memorandum which upholds the views expressed by *The Journal* in the October issue regarding Points 1-4 inclusive and discusses the controversial issues involved in Point 5. Following are abstracts and excerpts from the Bureau's opinion which is substantiated by numerous court decisions.

To start with the memorandum narrows the discussion "to the possible legal liability of the physician were he, after ascertaining the presence in the examinee not of syphilis in a communicable stage, but of some other physical or mental disability or abnormality which renders the examinee unfit for marriage or makes impossible the consummation of a satisfactory marriage relationship, to inform the other prospective marital partner of the conditions he has found, together with a proper explanation of their meaning and effect."

"The question must be viewed from two angles", the opinion states. "(1) The possible liability the physician would incur to the examinee in an action brought by him and (2) the possible disciplinary or penalizing action to which the state might subject the physician."

TWO METHODS OF PROCEDURE

It is pointed out that an examinee feeling aggrieved by a disclosure of the type mentioned could proceed against the physician involved only on one or both of two legal theories, namely, (1) that the disclosure constituted an actionable defamation; (2) that the disclosure was a breach on the part of the physician of a legal duty to keep inviolate information obtained by virtue of the relationship of patient and physician.

On these two points, the author of the opinion asserts:

"In my opinion, the aggrieved examinee could not successfully maintain action for defamation (libel or slander) because the physician would appear to have a complete defense either in the truth of the subject matter of the communication or, in the event the physician were mistaken in his diagnosis, in the conditional or qualified privilege attaching to his communication to the prospective marital partner.

AUTHORITY QUOTED

"As to the defense of truth, 33 Am. Jur., Libel and Slander, Section 117 reads, in part, as follows:

'Proof of the truth of the defamatory words employed is, as a rule, a complete defense in an action for libel or slander, in the absence of a statutory provision to the contrary. In several jurisdictions constitutional or statutory provisions on the subject are deemed to be declaratory of this common-law rule. In some jurisdictions, however, in order to justify a defamatory statement, it not only must be true, but must have been made from good motives and for justifiable ends.

'Under the general rule as to the truth of a statement, the fact that malicious or evil motives prompted the defendant to publish the truth will not impair his defense; nor is it material that the defendant did not know, at the time of his publication, that he was speaking the truth.'

"As to the defense of conditional or qualified privilege, Section 126, supra, reads, in part, as follows:

'A communication made in good faith on any subject matter in which the person communicating has an interest, or in reference to which he has a duty, is privileged if made to a person having a corresponding interest or duty, even though it contains matter which, without this privilege, would be actionable, and although the duty is not a legal one, but only a moral or social duty of imperfect obligation. The essential elements of a conditionally privileged communication may accordingly be enumerated as good faith, an interest to be upheld, a statement limited in its scope to this purpose, a proper occasion, and publication in a proper manner and to proper parties only. The privilege arises from the necessity of full and unrestricted communication concerning a matter in which the parties have an interest or duty, and is not restricted within any narrow limits.

'In the absence of malice, an utterance may be qualifiedly privileged, even though it is not true, and notwithstanding the fact that it contains a charge of crime. Indeed, it has been said that the doctrine of privilege rests usually, if not always, on the assumption that the words were untrue, but were excused by the occasion and the circumstances.'

"Of course the physician will not be protected in his communication unless it is made in good faith, without malice, and to a person having a legitimate interest. He cannot scatter the information by and large.

PHYSICIAN PROTECTED

"So far as our present assumed facts are concerned, it is my opinion that the prospective marital partner has such an interest in the subject matter of the communication assumed to have been made to her by the physician that the physician can be said in so communicating to possess a conditional or qualified privilege and, in the absence of bad faith and malice, not to be liable in libel or slander. And a mistaken diagnosis, unimpeached in its bona fides even though negligently made, should not afford to serve as evidence of actual or expressed malice and thus destroy the privilege. *Harriott v. Plimpton*, supra; *Kenney v. Gurley*, supra.

"There remains to be considered a potential liability a physician might incur under the theory that by his disclosure he has breached a duty to keep inviolate information obtained by means of the relation of physician and patient. While in no American or English case that I can find has a court ever enforced that duty (and incidentally no reference to the disclosure of a professional communication, or to this alleged duty, appears in the Restatement of the Law of Torts), that there is such a legal duty I have no doubt. The duty to keep professional confidences or secrets inviolate, however, is not absolute and must yield in certain circumstances in which a disclosure is in the public interest. This latter statement, of course, finds support over and over in instances in which the statutes require the reporting of infectious diseases or other types of diseases or conditions.

INTEREST OF THE STATE

"It seems readily admitted, then, that the cloak of secrecy must be unveiled with respect to instances of infectious disease and in other instances in which the **condition itself** of the patient is a threat or menace to society as a whole. The reasoning that impels this exception to an absolute duty to keep information inviolate seems to me equally applicable and to impel an exception with respect to the communication to a prospective marital partner concerning a condition that will render a marriage relationship, in which the State itself has a vital interest, unsatisfactory, or impossible. **That the State has an interest —and by State, of course, is included the general public if in fact the terms are actually not synonomous in this respect—in each and every marriage seems beyond dispute.** The State continues to exist, to expand and to improve in the main as births occur and as the marriage relationship nurtures offspring for service to the State. The State forbids the marriage of certain defective persons and lays down the conditions only on which it will permit the dissolution of a marriage relationship. Practically invariably among these causes for divorce a vinculo or a mensa et thoro is impotency existing at the time of the marriage. These facts to me indicate a public policy aimed at fruitful marriages producing useful, normal offspring. **Thus, then, a normal and potentially fruitful marriage relationship is a matter distinctly in the public interest and of concern to and affecting the public and probably equally as important to the public, from a long range viewpoint, as the control or suppression of contagious diseases.**

"So much for the theoretical reasons for regarding such a communication as a communication for protecting society and the general welfare. I believe that a careful analysis of the reported cases founded on a so-called breach of professional confidence will corroborate the opinion here expressed that for the disclosure of the type here involved, made in good faith and without malice, the physician would be subject to no liability to the examinee.

"If those statements are true, and they would so appear to me—under the facts we assume the disclosing physician, in my opinion, has a good defense—the occasion was privileged because he communicated with a person who had an interest in the matter; he had reasonable grounds for his belief; he has acted in good faith and without malice; and he has made no further disclosure than was reasonably necessary under the circumstances.

CONCLUSIONS DRAWN

"**From what is said above, it is my opinion that a physician, disclosing to the other prospective marital partner disabilities or ailments of an examinee that would endanger the other party to the prospective marriage or that it would make it impossible for the parties to enjoy a happy or satisfactory marriage relationship, is subject to no liability to the examinee, either in libel or slander or for disclosing a professional secret within the limitations noted; that is, if he acts in good faith and without malice and makes no further disclosures than is reasonably necessary under the circumstances. Obviously, the problem is simplified if the same physician examines both parties with the definite understanding that findings and observations, if at all material to the prospective relationship, shall be made known to the other party; or if the physician acting with respect to one party only enters into a similar understanding.**"

Discussing the second major point, namely the possible disciplinary or penalizing action by the State, the Bureau's opinion stated:

"Does a physician making a disclosure under the circumstances assumed subject himself to any possible penalizing or disciplinary action by the State? The disclosure does not constitute any common law or statutory crime and any action, it would seem, that the State could conceivably take would be by virtue of the provision of the Ohio medical practice act that authorizes the revocation of a physician's license for

> 'The wilful betrayal of a professional secret. But a physician, knowing that one of the parties to a contemplated marriage has a venereal disease, and so informing the other party to such contemplated marriage, or the parent, brother or guardian of such other party, shall not be held to answer for betrayal of a professional secret nor shall such physician be liable in damages for truthfully giving such information to such other party, or the parent, brother or guardian of such other party.' (Page's Ohio General Code Annotated, Section 1275.)

NOT "WILFUL" ACT

"**The disclosures under the circumstances here assumed would not constitute the 'wilful betrayal of a professional secret' and would not be the basis for the revocation of the physician's license.** Such a statutory provision is in derogation of common law and must be strictly construed and nothing can be regarded as intended by the legislature that is not strictly within the letter, as well as the spirit, of the law. With this principle of construction in mind, it will be observed that the legislature did not expressly prohibit all disclosures by a physician but only such disclosures as constitute 'wilful betrayal'. The disclosure here assumed is not 'wilful' inasmuch as 'wilful' assumes a deliberate intent with wrongful purpose to cause harm and is perpetrated without reasonable excuse. Here those elements of wilfulness are not present. Nor is the disclosure a 'betrayal' since, in the words of the court in the Simonsen case, supra,' "betrayal" is used to signify a wrongful disclosure of a professional secret in violation of the trust imposed by the patient' and here, as previously argued, the disclosure is not wrongful.

"It might be contended that by including what is, in effect, an exception or proviso to the general prohibition against the wilful betrayal of a professional secret the legislature has intended to prohibit the disclosure of all professional secrets other than under the circumstances expressly stated in the statute—that is, the legislative intent is that a physician may communicate only to a prospective marital partner or his or her parent, brother or guardian concerning the presence of veneral disease.

"The answer to such contention, I believe, lies in the fact that the whole provision is in derogation of common law and must be strictly construed. As is said in 25 Ruling Case Law, 'Statutes', Sections 281 and 282: 'When a statute which is evidently intended to make an innovation upon the common law is susceptible of more than one construction, it is not to be construed as altering the common law farther than the language of the statute clearly and necessarily requires. The general rule, as usually expressed, is that statutes in derogation of the common law are to be strictly construed.' 'A statute creating a new summary jurisdiction unknown to the common law should be strictly construed; nothing is to be presumed that is not expressly given by the act.'

"**Thus, then, the provision can only apply if the disclosure is 'wilful' and it is in fact a 'betrayal'.** Furthermore, against a contention that an exception in a statute amounts to an affirmation of the application of its provisions to all other cases not excepted and excludes all other exceptions (that is, that the Ohio legislature intended all disclosures to be taken as 'wilful betrayals' except information relating to venereal disease under the conditions stated in the statute) it can be argued that the conduct excepted is actually a proviso and that from the very office of a proviso it was used by the legislature 'out of abundant caution, merely to explain the general words of the enactment and to guard against a possible construction that is not intended' and 'to exclude some possible ground of misinterpretation of it as extending to cases not intended by the legislature to be brought within its purview'. (25 Ruling Case Law 'Statutes', Section 231 and cases cited in footnote 9 and 10 therein.)

PHYSICIAN NOT LIABLE

"**In my view, the disclosure under the circumstances stated will not subject the physician**

"**(1) To any liability in an action brought by the patient either for libel or slander or for breach of duty to keep a professional secret inviolate and**

"**(2) To any disciplinary or penalizing action by the State for 'wilfully betraying' a professional secret.**"

A third major, and important, point also is discussed in the memorandum, namely the physician's legal, moral or ethical duty to disclose information about an examinee to another person. On this point, the Bureau's opinion commented as follows:

"Obviously, from a strictly legal standpoint, from the fact that there is no liability for doing certain facts, one cannot in all instances logically reason that there is a legal duty to do those acts.

"I have quoted excerpts from decisions in which the courts have spoken of the legal duty of the physician to warn others who may to the physician's knowledge possibly have contacts with the patient afflicted with infectious disease to prevent harm to the third persons. Personally, I feel that the analogy can be carried to informing a prospective marital partner. Whether courts would so hold in a suit by the prospective marital partner against the physician for not disclosing defects, I cannot say.

ETHICAL PHASES DISCUSSED

"When we discuss the duty to disclose from a moral or ethical standpoint, I am in no position to expect consideration for any opinion that I would venture. Significant, however, are the provisions of the Principles of Medical Ethics of the American Medical Association contained in Chapter II, Section 1.

'Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life entrusted by a patient to a physician and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the confidences entrusted to him as a physician, of a communicable disease to which the healthy individual is about to be exposed. **In such a case, the physician should act as he would desire another to act toward one of his own family under like circumstances.** Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.' "

Careful analysis of the foregoing excerpts indicates that little, if any, legal liability attaches to the physician when he reveals matters of a confidential nature to an interested party. At the same time, it would be wise for a physician to handle each case on its own merits and not attempt to apply a uniform rule to all cases.

Ruling on Blisters Issued by State Industrial Commission

Instructions as to the application of the Workmen's Compensation Law to claims involving blisters were contained in a letter, dated August 20, 1941, addressed to John D. Goodrich, Supervisor of the Claims Section, State Industrial Commission, by Will T. Blake, chairman of the Commission. The letter read as follows:

"The question of whether or not blisters and callouses caused by employment should be considered as injuries or occupational diseases has been presented to the Commission.

"It is the opinion of the Commission that if blisters and callouses can be attributed to one specific act they should be considered as injuries. However, if callouses or blisters cannot be attributed to one specific act but result from the work performed by the claimant, they should be considered as occupational diseases.

Medical expenses and compensation for disability resulting from callouses or blisters, or the infection thereof, should be paid as in other claims".

Increase of 33.4 Per Cent In Claims Filed With Industrial Commission

Accident claims filed with the State Industrial Commission during the first nine months of 1941 totaled 207,838, an increase of 33.4 per cent over the same period in 1940, when 156,843 claims were filed. The total number of claims filed during 1940 was 212,033, which was an increase of 16.1 per cent over 1939, when 182,678 claims were filed.

The following figures furnished by John D. Goodrich, supervisor of claims for the Commission, shows a monthly comparison of the January-September period of 1941 with that of 1940:

	1940	1941	Per Cent Increase
January	18,825	19,407	3.1
February	14,795	18,420	24.6
March	16,602	20,478	23.3
April	16,315	20,761	35.6
May	16,392	23,393	42.7
June	16,986	24,134	42.0
July	17,469	26,420	51.2
August	20,120	27,794	38.1
September	19,339	27,031	39.8

There appears to be no doubt that 1941 will produce the greatest volume of claims in the history of the Commission. The record now is held by 1929, when 255,094 claims were filed.

Coming Meetings

Ohio State Medical Association, Columbus, April 28-30, 1942.

American Medical Association, Atlantic City, June 8-12, 1942.

American College of Physicians, St. Paul, April 20-24, 1942.

American College of Surgeons, Boston, Nov. 3-7.

American Society of Tropical Medicine, St. Louis, Nov 11-14.

Associated Anesthetists of the United States and Canada, Boston, Nov. 3-7.

Central Society for Clinical Research, Chicago, Nov. 7-8.

Fourth Annual Forum on Allergy, Detroit, Jan. 10-11, 1942.

National Society for the Prevention of Blindness, New York City, Dec. 4-6.

Radiological Society of North America, San Francisco, Dec. 1-5.

Society for the Study of Asthma and Allied Conditions, New York, Dec 6.

Southern Medical Association, St. Louis, November 10-13.

Society of American Bacteriologists, Baltimore, Dec. 29-31.

Western Surgical Association, St. Paul, Dec. 5-6.

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PUBLIC HEALTH EDUCATION has always played a major rôle in the policy of S. H. Camp and Company. The nationwide tour of the Transparent Woman exhibit provided a dramatic instance of this principle.

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Outline of Procedure for Reporting Inflammation of Eye Cases

Under the authority vested in him by House Bill 522, passed at the recent session of the Ohio General Assembly, (See "Digest of Important Medical and Health Laws", page 788, August, 1941, issue, *The Ohio State Medical Journal*), Dr. R. H. Markwith, State Director of Health, has issued a bulletin to local health commissioners outlining the procedure now in effect relative to the reporting, investigation and treatment of cases of inflammation of the eyes of the new born and all cases of gonorrheal ophthalmia, regardless of age. The bulletin reads in part as follows:

"The authority for providing medical treatment and nursing care for cases of inflammation of the eyes of the new born and gonorrheal ophthalmia has now been transferred from the Ohio Department of Health to the Ohio Commission for the Blind.

"All cases of inflammation of the eyes of the new born occurring in infants under 14 days of age, and all cases of gonorrheal ophthalmia, regardless of age, must be reported to the health commissioner of the city or general health district within which such person is a resident, within six hours, by physicians, hospitals or any person having knowledge of the existence of these conditions either on the official yellow franked communicable disease report card, or by letter, telephone or in person.

"The health commissioner is required to submit to the Ohio Department of Health, on the official yellow franked communicable disease report card, each case of inflammation of the eyes of the new born and gonorrheal ophthalmia that has been reported to him, in that these are reportable diseases.

"The health commissioner or person authorized by him is required to immediately investigate each case of inflammation of the eyes of the new born and each case of gonorrheal ophthalmia reported to him. The health commissioner is required to immediately submit to the Ohio Department of Health and to the Ohio Commission for the Blind, a copy of the report of the investigation of each case of inflammation of the eyes of the new born, and each case of gonorrheal ophthalmia on forms furnished by the Ohio Department of Health for this purpose.

"If the health commissioner is of the opinion the patient is in need of medical or nursing care, he will immediately request assistance from the Ohio Commission for the Blind, Oak Street at Ninth, Columbus, by calling Main 4591 during working hours. After working hours requests may be routed as follows in the order indicated: 1. Wm. E. Bartram, Columbus, Jefferson 2291; 2. Claude S. Perry, M.D., Columbus, Kingswood 2992; 3. Albert D. Frost, M.D., Columbus, Fairfax 0943.

"The Ohio Commission for the Blind will only authorize medical and nursing care when the patient is hospitalized. A fee of $25.00 will be paid to designated medical associates for each case, and a maximum allowance of $15.00 per diem will be provided for private duty nurses. Hospitalization, dressings, medication, laboratory services, care of breast fed infants and transportation of the patient are required to be provided from local funds. The Ohio Commission for the Blind requires that all cases of gonorrheal ophthalmia must be hospitalized."

More Ohio Physicians Ordered Into Active Service During Month

Additional Ohio physicians called to active military service during the past month were:

Corps Area Service Command (Reception Center), Camp Perry, Ohio: 1st Lt. Daniel Davis, Toledo; 1st Lt. Thomas Wood Watson, Wayne.

Corps Area Service Command, Ft. Knox, Ky.: 1st Lt. Lloyd P. Mallin, Cincinnati; 1st Lt. Harold Eastman Root, Bellevue.

First Armored Division, Ft. Knox, Ky.: 1st Lt. Otto Howard Salsbery, Norwood.

Ordered to active duty by War Department: 1st Lt. Jack Greenfield, Cleveland; 1st Lt. Gerald Wm. Quinn, Akron.

Assistant Navy Surgeons: Lt. William M. Enright, Barberton; Lt. William C. Marsh, Toledo; Lt. Norbert J. Schulz, Marion.

Toledo Bowlers Issue Challenge

The bowling league sponsored by The Academy of Medicine of Toledo and Lucas County for local physicians and dentists has challenged the Cleveland and Sandusky medical bowling leagues to a "home and home" match, and hereby challenges all other medical bowling teams or leagues within a reasonable distance of Toledo to play three games in Toledo and three games on their home alleys.

Beginning with four teams in 1939, the league increased to six teams last year and will consist of eight or more this season. The new governing board includes: Dr. E. E. Lyon, chariman; Dr. R. V. Schneider; Dr. D. L. Friedman; Dr. C. L. Felker; Dr. Forrest Ward and Dr. Karl D. Figley.

Health Museum Receives Grant

The Cleveland Foundation has made a grant of $250 to the Cleveland Health Museum and the Thomas H. White Trust has granted $1,500 to the Museum for equipment. The grants will be used for workshops in the Health Education Laboratory. New equipment will allow the museum to make new displays, loan exhibits and duplicate material for traveling exhibits.

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In Memoriam

William J. Blackburn, M. D., Salem; Hahnemann Medical College, Philadelphia, 1891; aged 79; died October 5. Dr. Blackburn practiced in Salem for nearly 50 years. He is survived by one son, two daughters, a brother and two sisters.

Carroll Hotchkiss Browning, M. D., Oberlin; Western Reserve University School of Medicine, 1925; aged 41; member of the Ohio State Medical Association and the American Medical Association; died September 30. Dr. Browning practiced in Painesville from 1927 to 1938, and in 1939 was a member of the staff of the State Sanitarium at North Royalton. For the past two years he had practiced in Oberlin. Dr. Browning was a lieutenant in the Medical Reserve Corps of the U. S. Army, and a member of the American Legion. Surviving him are his widow, two daughters and a brother, Dr. Robert H. Browning, Warrensville.

Margaret Coy, M. D., Columbus; Woman's Medical College, Philadelphia, 1934; aged 31; member of the Ohio State Medical Association and the American Medical Association; died October 11. Dr. Coy, who was certified by the National Board of Medical Examiners in 1935, had practiced in Columbus for the past four years. She is survived by her husband, her parents, a sister and a brother.

Dorman J. Clarke, M. D., Toledo; Toledo Medical College, 1897; aged 72; died September 29. Dr. Clarke practiced in North Toledo for 44 years. He was a Mason. His widow and a sister survive.

George Russell Curl, M. D., River Forest, Ill.; Eclectic Medical College, Cincinnati, 1910; aged 57; died October 8. Dr. Curl located in River Forest about 20 years ago, after having practiced in Edgerton, Williams County, for several years. His widow, a daughter and a son survive.

Otto Grismore, M. D., Steubenville; Eclectic Medical College, Cincinnati, 1903; aged 62; died September 9. Dr. Grismore practiced in Brilliant from 1903 to 1920, in Wheeling, W. Va., in 1921, and since that time in Steubenville. He was a member of the Presbyterian Church and the Masonic Order. Surviving are a daughter, two sisters, and five brothers.

Allen J. M. Howard, M. D., Cleveland; Howard University College of Medicine, Washington, D. C., 1893; aged 72; died September 1. Dr. Howard was credited with being the first Negro physician to establish a general medical practice in Cleveland, where he located in 1893. He retired in 1930. Dr. Howard was formerly president of the Adult Bible class of the St. John's A. M. E. Church. His widow, a daughter and a sister survive.

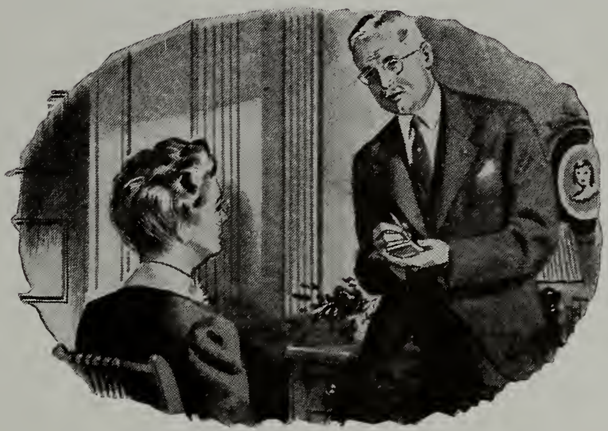
William Bowler Hubbell, M. D., Elyria; University of Wooster, Medical Department, Cleveland, 1898; aged 66; member of the Ohio State Medical Association and Fellow of the American Medical Association; died September 26. Dr. Hubbell retired in July after having practiced in Elyria for 43 years. He went to France during World War I as captain in the Medical Corps of the U. S. Army, and later served as chief surgeon at Camp Hospital No. 12, located at LaValdahon, with the rank of major. Dr. Hubbell was a member of the Church of Christ. He is survived by his widow, a daughter and a brother.

Joseph Nathaniel Hunter, M. D., Rayland; University of Cincinnati College of Medicine, 1910; aged 58; died September 26. A native of Jefferson County, he had practiced in Rayland for 28 years. Dr. Hunter was chosen as Rayland's first mayor at a special election two years ago, and was continued in office at the regular election. He had been a member of the Jefferson County Democratic Committee for 28 years. Dr. Hunter was a member of the Masonic Order, the Elks, Eagles and the Presbyterian Church. A sister survives.

James Ambrose Johnston, M. D., Cincinnati; Cincinnati College of Medicine and Surgery, 1881; aged 81; former member of the Ohio State Medical Association and former Fellow of the American Medical Association and the American College of Surgeons; died September 19. Retired at the time of his death. Dr. Johnston practiced in Cincinnati for many years. He was formerly professor of obstetrics at the Cincinnati College of Medicine and Surgery, and in 1918 was president of the Cincinnati Academy of Medicine. Dr. Johnston had served on the staffs of St. Mary Hospital and the old Presbyterian Women's Hospital. Surviving are his widow, a sister and a brother, Dr. Edward S. Johnston, Cincinnati.

Glen Edrie Macklem, M. D., Detroit, Mich.; University of Louisville School of Medicine, 1908; aged 58; former member of the Ohio State Medical Association and the American Medical Association; died August 31. Dr. Macklem practiced in Canton from 1922 to 1931. He was a member of the Phi Chi fraternity. His widow, two daughters and a son survive.

Mark Tad Morgan, M.D., Dayton; Ohio State University College of Medicine, 1929; aged 39; member of the Ohio State Medical Association;



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(1) 1935. J. Home Econ. *27*, 658.

(2) 1931. Ind. Eng. Chem. 23, 1066.

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Fellow of the American Medical Association; member of the American College of Physicians and the American Heart Association; died October 10. Recently in private practice in Dayton, Dr. Morgan was formerly a captain in the Medical Corps of the U. S. Army. He was honorably discharged a year ago because of ill health. Dr. Morgan was a member of the Masonic Lodge. His widow, a daughter, his mother and two brothers survive.

George Patrick O'Malley, M. D., Cleveland; University of Wooster, Medical Department, Cleveland, 1912; aged 54; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; died September 8. Police surgeon for the City of Cleveland since 1920, Dr. O'Malley has been a member of the staff of St. John's Hospital since its founding 25 years ago and was head of the surgery department for the past 10 years. He was a major in the Medical Corps of the U. S. Army during World War I, and was awarded distinguished service medals for gallantry in action by both the United States and England. Dr. O'Malley was a past commander of the Cuyahoga County Council and of the Police Post of the American Legion. He was a member of the Catholic Church. Four sisters survive.

Albert James Reycraft, M. D., Fostoria; Wayne University College of Medicine, Detroit, 1895; aged 79; member of the Ohio State Medical Association and the American Medical Association; died October 3. A native of Canada, Dr. Reycraft practiced in Fostoria for nearly 40 years. He was a member of the Methodist Church. Surviving are his widow and a son—Dr. Leonard J. Reycraft, Cleveland.

Elgin Howard Shildrick, M. D., Cleveland; University of Wooster, Medical Department, Homeopathic, Cleveland, 1896; aged 72; died September 1. Dr. Shildrick practiced medicine in North Royalton for 11 years, before locating in Cleveland in 1907 and entering the real estate business. His widow, two sisters and a brother survive.

Henry Thomas Sutton, M. D., Zanesville; Medical College of Ohio, Cincinnati, 1885; aged 79; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; died October 1. Dr. Sutton retired several years ago after having practiced in Zanesville for over 50 years. In 1888 he formed the first board of health in Zanesville and served as health commissioner until 1900. One of Dr. Sutton's outstanding achievements was the organization of Good Samaritan Hospital in 1900. Active in Democratic politics, he was a delegate to five Democratic National Conventions. Dr. Sutton was a member of the Catholic Church. His widow and five daughters survive.

Edith Johnson Thomas, M. D., Uhrichsville; College of Medicine and Surgery, Chicago, 1899; aged 82; died September 3. Dr. Thomas had practiced in Salem and Alliance. Surviving are a son, a sister and a brother.

Grant S. Van Horn, M. D., Batavia; Eclectic Medical College, Cincinnati, 1894; aged 73; member of the Ohio State Medical Association and the American Medical Association; died October 16. For several years Dr. Van Horn practiced in Cincinnati, and in 1900 moved to Batavia. Prominent in civic affairs in Clermont County, Dr. Van Horn was a member of the Batavia Board of Education for 15 years and for the last 25 years had been a director of the First National Bank of Batavia. His widow and a daughter survive.

Absalom J. Welch, M. D., McAlester, Oklahoma; Starling Medical College, Columbus, 1881; aged 88; member of the Oklahoma State Medical Association and the American Medical Association; died September 7. A former member of the Madison County Medical Society and the Ohio State Medical Association, Dr. Welch practiced in Mt. Sterling until he moved to Oklahoma 30 years ago. Two sons and two daughters survive.

Philip Douglas Werum, M. D., Toledo; Chicago College of Medicine and Surgery, 1916; aged 46; member of the Ohio State Medical Association and Fellow of the American Medical Association; died September 3. Dr. Werum had practiced in Toledo for 25 years, and was a former member of the surgical staffs of Robinwood and St. Vincent's Hospitals. At the time of his death he was physician for the Textileather Corporation. Dr. Werum was a lieutenant-commander in the Medical Corps of the U. S. Navy during World War I and was a member of the American Legion. He was also a member of the Episcopal Church and Nu Sigma Nu. His widow and a sister survive.

Elbert Palmer Zeumer, M. D., Cincinnati; Eclectic Medical College Cincinnati, 1899; aged 64; former member of the Ohio State Medical Association and the American Medical Association; died September 21. Dr. Zeumer started his medical career in Bright, Ind., as a private practitioner. During World War I he was located at Kings Mills, in charge of the hospital at the Peters Cartridge Company. For 20 years he was head of the hospital of the Procter and Gamble Company at Cincinnati and for the last year and a half had been medical advisor for that company. He was a member of the Masonic Order and the Doctors' Hobby Club. His widow, a daughter and a son survive.

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Do You Know - - -

The Ninety-First Annual Meeting of The Medical Society of the State of Pennsylvania, scheduled to be held in Pittsburgh, October 6-9, 1941, was cancelled on October 4 because of a strike of Pittsburgh hotel employees. Meetings of the House of Delegates was transferred to Philadelphia.

* * *

September 29 was the eighty-fifth anniversary of the beginning of organized medicine in Toledo. On September 29, 1851, six physicians met in the office of Dr. Homer Graham and adopted the constitution and by-laws of the Toledo Medical Association.

* * *

Dr. R. C. Paul, Wooster, veteran secretary of the Wayne County Medical Society, sketched his experiences of a half century in the practice of medicine in Wayne County, at a recent meeting of the local Kiwanis Club, of which he is a past president.

* * *

In 1939, the latest year for which data are available, midwives attended the births of 208,843 babies in the United States, or 9.2 per cent of the total live-born. In urban areas midwives attend one in 50 births, while in rural areas the proportion is one in six. Among white persons midwives are in attendance in slightly more than 3 per cent of the live births; among Negroes, somewhat more than half the babies are delivered by midwives.

* * *

Dr. James J. Tyler, Warren, historian of the Grand Lodge of Ohio, Free and Accepted Masons, has been elected to receive Masonry's highest honor—the 33rd degree—at Boston next year.

* * *

Two medical officers and 15 medical department enlisted men, all qualified parachutists, have been assigned to each of the new infantry parachute battalions in training at Fort Benning, Ga. The medical personnel was selected for high standard of physical ability and professional attainments from a list of volunteers.

* * *

Dr. William M. German, director of the department of pathology of Good Samaritan Hospital, Cincinnati, has returned to that city after having taught a three month's course in pathology at National University of Colombia, South America, located at Bogota. Dr. German's assignment was in connection with the Pan-American Cultural Relations program.

Dr. Albert McCown, formerly director of the Division of Maternal and Child Health of the U. S. Children's Bureau, has been appointed director of medical and health service of the American Red Cross.

* * *

Dr. Harry V. Paryzek, Cleveland, President of the Ohio State Medical Association, has been elected a member of the Board of Trustees of Western Reserve University. He is one of the four new trustees representing the alumni.

* * *

During the past fiscal year the Army Medical School Laboratory produced 33,500,000 cubic centimeters, or about 8,500 gallons, of typhoid vaccine, eight times as much as in the previous year.

* * *

Dr. Dean DeWitt Lewis, professor emeritus of surgery, Johns Hopkins University School of Medicine, and former president of the American Medical Association (1933-1934), died at his home in Baltimore on October 9.

* * *

Bids submitted by physicians to handle medical care of the indigent on a contract basis were recently tabled by the county commissions of Scioto County when a committee of the Hempstead Academy of Medicine protested changing from the existing plan which permits free choice of physician.

* * *

Stanley R. Mauck, executive secretary of the Columbus Academy of Medicine and director of the Columbus Bureau of Medical Economics, spoke on "Handling the Doctor's Accounts Receivable Problem", in a symposium on "The Business Side of Medicine", presented for office secretaries and assistants during the 76th Annual Meeting of the Michigan State Medical Society, Sept. 16-19, at Grand Rapids.

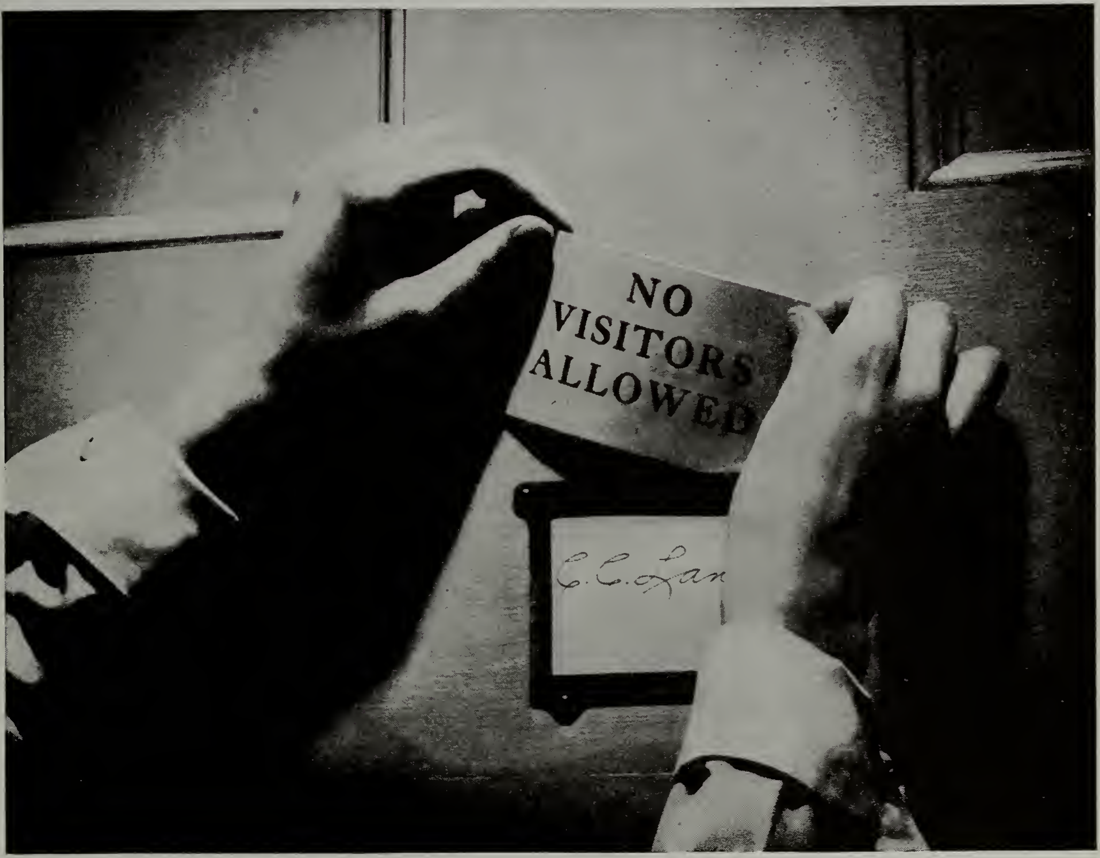
* * *

A trust fund, the income of which is "to be used exclusively for care of the poor" at White Cross Hospital, Columbus, was set up under the will of the late Helen S. Thompson. It is estimated the fund will amount to more than $100,000.

* * *

Dr. Robert F. Parker, associate professor of medicine, Western Reserve University School of Medicine, Cleveland, has been on a three months' tour of the Caribbean area studying tropical diseases. In San Juan he joined Dr. James A. Doull, professor of hygiene and public health at Western Reserve, who is making a study of tuberculosis and leprosy in Puerto Rico.

"SEE YOUR DOCTOR!" **Reproduced below is Number 171 of a series of full-page advertisements published by Parke, Davis & Co. in the interest of the medical profession. This "See Your Doctor" campaign has been running in *The Saturday Evening Post* and other leading magazines for thirteen years.**



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So he promptly followed his friend's suggestion and took a cathartic. And in a matter of hours he was being rushed by ambulance to the hospital . . . with a ruptured appendix.

His friend, of course, had acted from the kindest of motives. But he didn't know that an abdominal pain might mean acute appendicitis, in which case a cathartic should never be taken.

Unfortunately, appendicitis is only one of many illnesses where amateur medical advice can result in tragedy. Yet, human nature being what it is, many people just can't resist the temptation to offer advice when a friend is sick.

Intelligent medical treatment depends upon various factors which only a physician is qualified to evaluate. When something seems wrong with you, it is the part of wisdom to observe this common-sense rule: Take a friend's advice about buying a radio, a car, or even a home if you wish; but don't let him advise you about your health.

Don't let a friend who *means* well tell you how to *get* well. To get well, and *keep* well, the man to see is your physician.

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Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

A meeting of the Adams County Medical Society was held at the Knights of Pythias Hall, Cherry Fork, Wednesday, October 15, beginning at 10:30 A.M. Speakers included: Dr. Dewey H. Reps, Cincinnati; Dr. R. B. Ellison, Peebles, and Dr. W. M. Hoyt, Hillsboro. Discussions were led by Dr. R. C. Wenrick, Winchester, Dr. F. C. Leeds, Winchester, and Dr. W. B. Roads, Hillsboro.—O. T. Sproul, M.D., secretary.

HAMILTON

The following programs were presented by The Academy of Medicine of Cincinnati during October:

October 7—"The Nature and Treatment of Arterial Hypertension", Dr. Irvin H. Page, director of the Lilly Laboratory for Clinical Research, Indianapolis, Ind.

October 21—"Smoke and Health", Dr. I. Hope Alexander, director, Department of Public Health, Pittsburgh, Pa.; "A Practical Approach to the Problem of Urban Air Pollution", Dr. Clarence A. Mills, professor of experimental medicine, University of Cincinnati College of Medicine; "Smoke Abatement Is Possible and Practical", C. A. Jeorger, professor of mechanical engineering, University of Cincinnati.—Bulletin.

HIGHLAND

Dr. Robert C. Kirk, Columbus, spoke on "Aspects of Some of the New Virus Diseases", at a meeting of the Highland County Medical Society, Wednesday noon, October 1, at Greenfield.—News clipping.

Members of the Woman's Auxiliary celebrated the first anniversary of their organization by entertaining their husbands at dinner, Wednesday evening, October 8 at the Highland House, Hillsboro. F. R. Harris, Greenfield, a world traveler and lecturer, was guest speaker.—Mrs. W. B. Roads, secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

GREENE

Dr. Sander Goodman, Cincinnati, gave an excellent lecture on the causes, diagnosis, prognosis and treatment of "Hematemesis", at a meeting of the Greene County Medical Society, Thursday, October 2, at Xenia.—Donald F. Kyle, M.D., secretary.

MIAMI

Members of the Woman's Auxiliary were guests of the Miami County Medical Society at a dinner meeting, Thursday, October 2, at the Troy Country Club. A sound movie on "Exploring With X-rays", was shown through the courtesy of the General Electric Company. Rev. H. J. Renniker, professor of psychology, University of Dayton, spoke on "Impressions of Hawaii".—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

Dr. Charles D. Aring, Cincinnati, spoke on "Polyneuritis", at a complimentary dinner meeting of the Montgomery County Medical Society, Friday evening, October 3, at the Dayton State Hospital. Dr. Gordon F. McKim, Cincinnati, addressed the society on "Infections of the Urinary Tract", at a meeting on Friday evening, October 17.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

ALLEN

Twenty-three members were present at a meeting of the Woman's Auxiliary to the Allen County Medical Society, Tuesday afternoon, September 23, at the home of Mrs. C. L. Steere, Lima. The program was in charge of Mrs. R. B. Krouse. Assistant hostesses were Mrs. Herbert A. Thomas and Mrs. D. W. T. McGriff.—News clipping.

CRAWFORD

A resumè of the work of the Women's Field Army for the Control of Cancer was given by Mrs. John S. Kiess, Bucyrus, at a meeting of the Woman's Auxiliary to the Crawford County Medical Society, Tuesday, September 9, at Hotel Talbott, Galion. An open discussion of the cancer problem followed. Completing the program were talks on current events in medicine by Mrs. D. D. Bibler and Mrs. W. G. Carlisle, Bucyrus.—News clipping.

LOGAN

Dr. O. C. Amstutz was the speaker at a meeting of the Logan County Medical Society, Friday evening, September 26, at the Hotel Ingalls, Bellefontaine.—News clipping.

SENECA

The annual social meeting of the Seneca County Medical Society was held at the Fostoria Country Club, Wednesday afternoon and evening, September 10. There was a golf tournament in the afternoon. Several members and their wives gave brief talks after dinner. The remainder of the evening was spent informally in cards and dancing.

Dr. J. R. Tillotson, Lima, spoke on "Fractures of the Femur", at a meeting of the society, Thursday evening, October 9, at the Shawan Hotel,

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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Lima. Dr. Guy E. Noble, St. Marys, Third District Councilor, made his annual visit to the society, and talked on the Enabling Act and the Farm Security Administration medical program.—N. E. Williard, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

HENRY

Dr. W. W. Green, Toledo, was guest speaker at a meeting of the Henry County Medical Society, Tuesday evening September 9, at Napoleon. —News clipping.

LUCAS

The Academy of Medicine of Toledo presented the following programs during October:

October 3—General Academy Meeting. "Medical England and the War", Dr. K. C. McCarthy.

October 10—Section of Pathology, Experimental Medicine and Bacteriology. "Mosquito Abatement Control", Dr. F. S. Fuller, Chicago, Ill.

October 17—"An Evaluation of the Massive Dose Therapy in Syphilis", Dr. David C. Elliott.

October 24—"Recent Advances in Treatment and Care of Cerebral Palsy", Dr. B. G. Chollett.

October 31—Eighth Annual Postgraduate Day, The Medical Institute of the University of Toledo. Roundtable discussions, "Digitalis: New Light on an Old Drug"; "The Management of Heart Failure"; "Circulatory Stimulants and Shock", by Dr. McKeen Cattell, Dr. Harry Gold and Dr. Eugene F. Dubois, members of department of physiology, Cornell University Medical College, New York.—Bulletin.

WOOD

The Wood County Medical Society resumed its meetings after the Summer vacation on Thursday, September 18, with a dinner session at the Women's Club, Bowling Green. Dr. Foster Myers, Toledo, read a paper on "Blood Dyscrasias". Using colored lantern slides, Dr. Myers covered the common blood diseases and their treatment in an enlightening manner. A laboratory technique suitable for the general practitioner was described and many questions painstakingly answered. Dr. Theodore Zbinden, Toledo, was a guest at the meeting, and at the suggestion of President Boyle, he gave an impromptu talk on the new Premarital Physical Examination Law and its applications, suggesting many ways in which physicians can aid in its enforcement. Both talks were much appreciated, and we hope to have these essayists again in the near future.—D. R. Barr, M.D., correspondent for *The Journal.*

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

ASHTABULA

An illustrated talk on his book, "Who Walk Alone", was given by Dr. Perry Burgess, Geneva-on-the Lake, at a dinner meeting of the Ashtabula County Medical Society, Tuesday, September 9, at the Hotel Ashtabula, Ashtabula. Invited guests included wives of members and student and graduate nurses of the Ashtabula General Hospital.—News clipping.

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during October:

October 3—Clinical and Pathological Section. "An Unusual Case of Sarcoidosis", Dr. H. N. Cole; "Cyst of the Spleen", Dr. Macon Leigh; "Cyst of the Liver", Dr. F. M. Barry; "Renal Damage from Sulfathiazole", Dr. W. B. Seymour; "An Unusual Case of Diverticulitis", Dr. F. R. Mautz.

October 8—Medical Practice Section, Symposium on the Treatment of Some Common Skin Conditions. "Acne Vulgaris", Dr. J. E. Rauschkolb; "Chronic Urticaria", Dr. W. P. Garver; "Contact Dermatitis", Dr. J. R. Driver; "Athlete's Foot", Dr. C. L. Cummer; "Psoriasis", Dr. E. W. Netherton; "Pruritis", Dr. H. N. Cole.

October 12—Obstetrical and Gynecological Section." Problems in the Treatment of Trichomaonas Vaginitis", Dr. Robert L. Faulkner and Dr. R. S. Lupse; "Heart Disease and Pregnancy"—"Medical Aspects", Dr. Leonard G. Steuer, with opening discussion by Dr. Roy W. Scott; "Obstetrical Aspects", Dr. Howard P. Taylor, with opening discussion by Dr. A. J. Skeel.—Bulletin.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

COLUMBIANA

Twenty-four members of the newly organized Woman's Auxiliary to the Columbiana County Medical Society were present at a luncheon, Tuesday, September 16, at the Hotel Wick, Lisbon. Mrs. V. E. McEldowney, East Liverpool, who organized the Auxiliary, presided at the business session. The following officers were elected: Mrs. M. D. McCutcheon, East Liverpool, president; Mrs. Chester De Walt, Columbiana, vice-president; Mrs. L. W. King, Salem, secretary; Mrs. J. S. Atchison, East Palestine, treasurer.—News clipping.

MAHONING

Dr. Tom D. Spies, Cincinnati, associate professor of medicine, University of Cincinnati College of Medicine, presented a program on "Nutrition and Vitamins", Thursday afternoon and evening, October 30, at a postgraduate session sponsored by the Mahoning County Medical Society, at the Youngstown Club, Youngstown.—Bulletin.

PORTAGE

An educational film on "The Anemias", produced by the Eli Lilly Company, was shown at a meeting of the Portage County Medical Society, Thursday evening, October 2, at the Robinson Me-

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morial Hospital, Ravenna.—Emily J. Widdecombe, M.D., secretary.

STARK

Three members of the faculty of the Johns Hopkins University School of Medicine, Baltimore, Md., presented the program for the Third Annual Postgraduate Day of the Stark County Medical Society, at the Courtland Hotel, Canton, Wednesday, October 8. Dr. Wm. F. Rienhoff, Jr., associate professor of surgery, spoke on "The Present Status of the Treatment of Malignant Tumors of the Lung", and "The Surgical Treatment of Peptic Ulcer". Dr. Charles W. Wainright, associate professor of medicine, discussed "The Use of Gold in the Treatment of Chronic Rheumatoid Arthritis", and Dr. E. L. Richards, associate professor of psychiatry, gave an address on "The Place of Psychiatry in the Fraternity of Medicine".—Bulletin.

SUMMIT

Dr. William J. Dieckmann, associate professor of obstetrics, University of Chicago, spoke on "The Management of the Toxemias of Pregnancy", at a meeting of the Summit County Medical Society, Tuesday, October 7, at the Akron City Hospital.—Bulletin.

TRUMBULL

Approximately 50 physicians attended a meeting of the Trumbull County Medical Society, Thursday evening, September 18, at the Warner Hotel, Warren. The speakers were: Dr. George W. Crile, Jr., Cleveland, who discussed "Diagnosis and Treatment of the Jaundiced Patient", and Dr. Allen Graham, Cleveland, whose subject was "Clinical versus Pathological Malignancies".—News clipping.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

MUSKINGUM

Dr. Beatrice T. Hagen, county health commissioner, and Daniel G. Caudy, health commissioner for Zanesville, reported on the local infantile paralysis situation at a meeting of the Muskingum County Academy of Medicine, Wednesday night, September 4, at the University Club, Zanesville. Following a discussion of the new state premarital physical examination law, it was agreed that the fee to be charged for such examinations should be determined by the examining physician.

Dr. Harrison S. Evans, Columbus, was guest speaker at a meeting of the academy, Wednesday evening, October 1. W. A. Zerbe, Columbus, representative of the Central Hospital Service, explained that organization's plan for group hospitalization.—News clipping.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

SCIOTO

"Practical Pointers in the Diagnosis of Pulmonary Tuberculosis", was the topic discussed by Dr. Harry F. Rapp at a meeting of the Hempstead Academy of Medicine, Monday evening, October 13, at the Portsmouth General Hospital.

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Charles Spoler, executive secretary, Scioto County Tuberculosis and Health Association, also spoke. —Sol Asch, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

The Columbus Academy of Medicine presented the following programs during October:

October 6—"The Clinical Use of Heparin", Dr. Jay McLean.

October 20—"Results of Collapse Therapy in Pulmonary Tuberculosis: A Nine Year Study", Dr. Myron D. Miller.

October 27—Section in General Medicine. "Therapeutic Action of B Complex", Dr. A. G. Worton and Dr. C. F. Lombard.—Bulletin.

Dr. Ruth St. John spoke on "The Need of School Lunches for Underprivileged Children", at a meeting of the Woman's Auxiliary, Monday evening, September 22, at the Columbus Gallery of Fine Arts.—News clipping.

Lucille Phillips, food consultant for the Moores and Ross Milk Co., spoke on "Nutrition and Defense", at a meeting of the Woman's Auxiliary, October 20—Bulletin.

MADISON

Dr. John E. Hoberg, Columbus, was guest speaker at a meeting of the Madison County Medical Society, Thursday, September 5, at London, —News clipping.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

LORAIN

An address on "Common Problems in Allergic Diseases", was given by Dr. Leonard H. Harris, Elyria, at a dinner meeting of the Lorain County Medical Society, Tuesday, October 14, at the Elks' Restaurant, Elyria. Memorial addresses in recognition of the late Dr. Wm. B. Hubbell and the late Dr. Carroll H. Browning, were given by Dr. Geo. D. Nicholas and Dr. A. C. Siddall, respectively.—L. H. Trufant, M.D., secretary.

RICHLAND

Mrs. J. L. Stevens and Mrs. J. F. Morey were hostesses at a meeting of the Woman's Auxiliary to the Richland County Medical Society, Monday, October 6, at Mansfield.—News clipping.

Cincinnati—A campaign is under way to raise $400,000 for a new nurses' educational and dormitory building for Bethesda Hospital.

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The Physician's Bookshelf

Complete Weight Reducer, by C. J. Gerling. ($3.00. *Harvest House, New York City)*, is a very comprehensive presentation of this problem. A good deal of space is given to the exposing of the commercial evils which surround the treatment of obesity. It offers a very important reference to all the various popular fads and frauds. The makeup is unique in that its topics are arranged alphabetically.

The Christian Interpretation of Sex, by Otto A. Piper, ($2.00. *Charles Scribner's Sons, New York City)* is a rediscovery of the Biblical view. The author contends that the problems of sex relationship cannot be solved on the basis of purely moral principles, or primarily from the standpoint of hygiene as is so often pre-supposed. This side has received all too little emphasis by recent writers.

Sulfanilamide and Related Compounds in General Practice, by Wesley W. Spink. ($3.00. *The Year Book Publishers, Inc., Chicago, Illinois)* is a very practical presentation detailing the value of this type of chemotherapy and ought to find a place on the desk of everyone treating infectious diseases.

Milk Sickness Caused by White Snake Root, by Edward Lincoln Mosely ($1.00. *Bowling Green, Ohio)*, is a comprehensive survey of facts about milk sickness. This represents the research and investigations by the author and this compilation of literature is over more than a century. The book belongs, therefore, in the library of every physician and veterinarian in areas where snake root or rayless goldenrod is known to occur.

Cerebral Spinal Fever, by Dennis Brinton ($3.00. A *William Wood Book, Baltimore)*. This is a monograph by a competent English authority. It is a distinctly clinical book with much of its space allotted to treatment. It is a well worthwhile volume to have in one's library and may assume much greater importance as we go into the war period.

Care of the Aged (Geriatrics), by M. W. Thewlis, M.D. ($6.00. Third Edition. *C. V. Mosby Company, St. Louis)*, is still the only recent book dealing with the medical care of this age group. It has always seemed to your reviewer that there was just as much need of special attention to the aged as there is to the infant. Certainly the feeding problems of old people are as definite and as important as those of the young. This book is important to every physician and its contents to all who are growing old.

A Doctor in Homespun, Autobiography of Mary Phylinda Dole, M.D. ($2.50, published by the author at *Shelburne Falls, Massachusetts)*, tells the story of a woman who is known to all who know and love Mt. Holyoke. It is a vivid story of the little Mary studying her Latin while she tended sap in a New England sugar house, the young Doctor Mary at Pasteur Institute in Paris, driving 15 miles in the night to an unknown patient, and finally the older Doctor Dole pushing the shuttle of her loom watching the developing design as she forms her thoughts on the contributions her medical fellowship will make to the world. A lively story in the proud Yankee tradition.

A Manual on the Treatment of Fractures, by John A. Caldwell, M.D. ($3.50, *Thomas, Springfield, Illinois)*, is the lecture notes of our beloved past-president and is designed to meet the needs of medical students, house officers, and general practitioners. The author has successfully tried to rationalize what is considered good practice

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Physicians who have recently completed their internships, or physicians, with experience, desiring to change locations are requested to file their names with the State Headquarters Office, Ohio State Medical Association, 1005 Hartman Theater Building, Columbus, Ohio.

Frequently, the Headquarters Office receives inquiries from physicians seeking assistants, partners, or men qualified for positions on private hospital staffs.

If physicians seeking new opportunities or desiring to change locations will file their names with that office, an effort will be made to furnish them with suggestions and at the same time render a service to members seeking assistants, etc.

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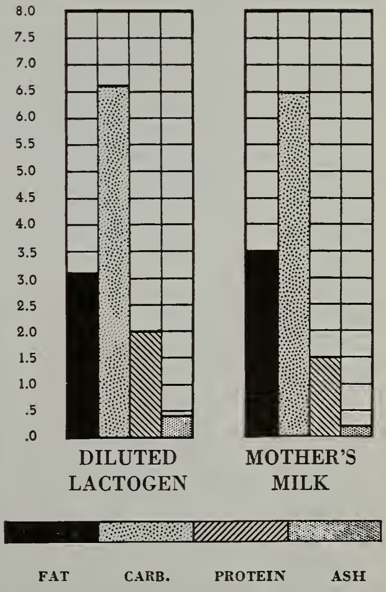

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> —John Lovett Morse, A.M., M.D.
> Clinical Pediatrics, p. 156.

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and point out the errors in poor management. He has followed the fundamental principle involved in good undergraduate teaching, namely, to endeavor to help the student in understanding and to use his eyes, hands and brain instead of being crammed with the technique of some particular mechanical contrivance.

Food and Nutrition. ($1.00. *Sisters of St. Joseph, Brentwood, New Jersey)*, aims to present the basic principles and information on foods and nutrition, including the wise choice, the careful preparation and economic purchasing of foods, and fits well into our present campaign to improve the nutrition of our people.

PAMPHLETS

Proceedings of the 17th Annual Meeting of the Ohio Student Health Association. Contains ten splendid papers on the health of college students and discusses the problems as found in Ohio colleges.

Mental Disease and Social Welfare, by Horatio M. Pollock. ($2.00. *State Hospital Press, Utica, New York)*. Constitutes a noteworthy contribution to a better understanding of mental disease in its social relations. The language is non-technical and clear. If this is not of professional interest to you it certainly will be to you in your capacity as a citizen and civic leader.

Community Organization for Health Education (9¢. *American Public Health Association, 1790 Broadway, New York City)* is the report of the committee on the subject presented to the Public Health Educational and Health officers sections and presents the significant experiences in community organization which have been helpful to health departments, school systems and private health agencies. It, therefore, is of interest to every civic minded physician. One of the most encouraging developments in our profession has been the increase in the number of our members who have become civic minded in recent years. Time was not so long ago when physicians were "too busy" to even take time to vote.

Medical Diagnosis and Symptomatology, by Samuel A. Loewenberg, M.D. ($12.00. *F. A. Davis and Co., Philadelphia)* is the fifth edition of the author's diagnostic methods with its scope considerably enlarged. The new material consisting largely of matters dealing with vitamin deficiencies, disease allergy, geriatrics, endocrinology and blood diseases have been entirely re-written as have many other sections. The book is planned to serve as an aid in the diagnosis of a patient's ailment and is a good presentation of general information upon medical diagnosis from the viewpoint of the general practitioner.

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[1] Jeffcoate, T. N. A.: *Brit. Med. J.* 2:671 (Sept. 30) 1939.

Excellent Program Is Presented at Northwest Ohio Meeting

Approximately 100 physicians attended the 97th meeting of the Northwestern Ohio Medical Association at the Napoleon High School, October 7. The scientific program was presented by three members of the faculty of the New York Postgraduate Medical School, Columbia University. Dr. Wilbur Duryee, associate clinical professor of medicine, spoke on "Diagnosis and Treatment of Peripheral Vascular Disease". Dr. Z. Bercovitz, associate clinical professor of medicine, discussed "Diagnosis and Treatment of Acute and Chronic Diarrheas of Infectious Origin, Including Those Related to Parasitic Infections". The subject presented by Dr. R. Franklin Carter, associate clinical professor of surgery, was "Diagnosis and Treatment of Gallbladder Disease".

At the luncheon session Dr. Hardy A. Kemp, Dean, Ohio State University College of Medicine, spoke on "Present Day Trends in Medical Education". Dr. Kemp stressed the present-day practice of emphasizing clinical teaching in the last two years of a medical course, and the fast-growing organization for postgraduate training in the specialties. He explained some of the problems in medical education arising out of the National Defense Program. Dr. Harry V. Paryzek, Cleveland, President of the Ohio State Medical Association, expressed greetings from the Association and urged study by county medical societies of local needs for medical service plans. Introductions were acknowledged by Dr. Edward J. McCormick, Toledo, President-Elect of the State Association, and Charles S. Nelson, Columbus, the Executive Secretary.

Arrangements for the meeting were made by the retiring officers: Dr. Frederick G. Maurer, Lima, president; Dr. B. F. Mowry, Findlay, vice-president; Dr. C. L. McKibben, Toledo, secretary; Dr. John M. Leahy, Tiffin, treasurer; and Dr. Donald R. Printz, Ada, chairman of the Golf Committee.

The Association voted to meet next year in Marion on the first Tuesday in October. Dr. Mowry was named president. Other officers are: Dr. McKibben, vice-president; Dr. W. B. Recker, Leipsic, secretary; and Dr. Leahy, treasurer.

Physicians who registered at the meeting were:

E. A. Murbach, Archbold; C. J. Bondley, Belle Center; O. C. Amstutz, F. B. Kaylor, Bellefontaine; W. C. Miller, Belmore; M. R. Bixel, B. W. Travis, Bluffton; R. K. Ameter, Gerald E. Cheadle, H. R. Mayberry, Bryan; Harry V. Paryzek, Cleveland; John U. Fauster, Sr., D. J. Slosser, Defiance; P. S. Bishop, C. L. Hutchins, Delta; Geo. H. Semon, Fayette; D. B. Biggs, Lena S. Enright, J. M. Firmin, John V. Hartman, B. F. Mowry, E. E. Rakestraw, T. A. Spitler, E. J. Thomas, F. M. Wiseley, Findlay; D. R. Barr,

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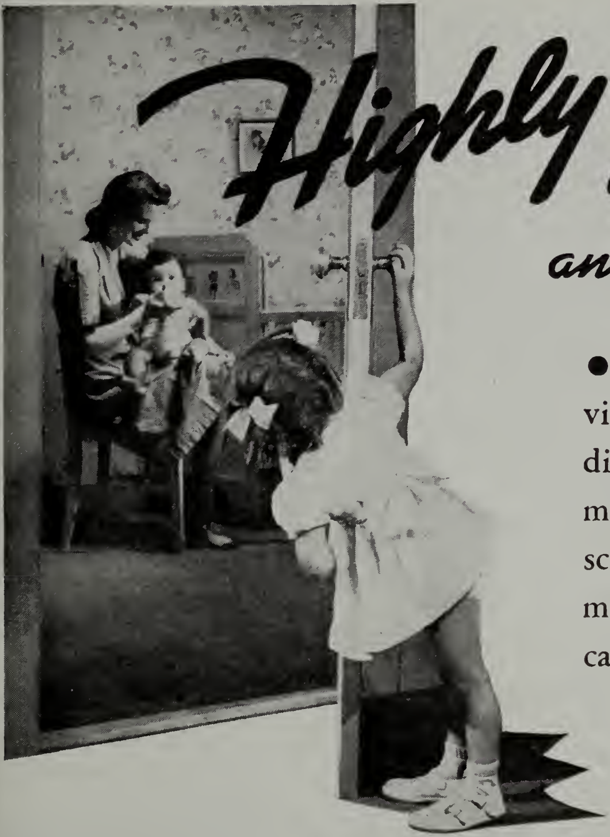

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W. W. Beauchamp, John LoCricchio, F. G. Maurer, P. I. Tussing, Lima; T. F. Smyth, Lyons; J. H. Fiser, Malinta; M. L. Bull, J. W. Bull, Marion; Richard L. Morgan, R. T. Morgan, Jack F. Smyth, E. S. Welter, Marion; R. E. McBroom, McComb; J. R. Bolles, T. P. Delventhal, C. M. Harrison, Thomas Quinn, Napoleon; E. D. Foltz, E. A. Powell, North Baltimore; C. H. Zinsmeister, Ottawa; H. A. Neiswander, M. B. Rice, Pandora; H. E. Ward, Pemberville; George McGuffin, Pettisville; F. F. Price, Wm. H. Price, Stony Ridge; C. W. Montgomery, F. M. Smith, Sycamore.

R. R. Hendershott, John M. Leahy, Tiffin; W. W. Beck, A. A. Brindley, Wendell Green, Arthur Harrison, Paul Hohly, Richard Hotz, E. W. Kelly, David K. Levin, L. A. Levison, Edward J. McCormick, C. L. McKibben, C. W. McNamara, Norman B. Muhme, E. F. Ward, Theodore Zbinden, Toledo; F. C. Duckwall, G. A. Edwards, O. J. Fatum, B. L. Good, Roland H. Good, Van Wert; H. L. Prouty, West Unity; R. Franklin Carter, New York City.

Health Problems in National Defense Aired at Health Conference

Health problems exaggerated by preparations for defense were emphasized at the 22nd Annual Conference of Health Commissioners held September 24 and 25 at the Deshler-Wallick hotel in Columbus. More than 300 city and county health officers, public health nurses, and others registered for the meeting.

A "town meeting on public health problems" was held under the leadership of Dr. R. H. Markwith, State Director of Health, at the first general session. During more than two hours of general discussion, with questions from the floor directed at staff members and program speakers, the health officials aired their current difficulties.

Twelve principal shortcomings of nutrition in Ohio at the present time were listed and explained in a paper on "Nutrition in a National Defense Program" by Martha Koehne, Ph.D., nutritionist in the state health department. A sound film entitled "Proof of the Pudding" was shown during the session on nutrition.

"Public Health Problems in England at War" were described by Dr. N. Paul Hudson, Ohio State University College of Medicine, who recently returned from Britain after spending a year there for the Rockefeller Foundation. He stressed the problem of providing the nation with adequate diet and showed how the British Ministry of Food was meeting it. Dr. Hudson also spoke of the steps taken to control communicable disease in London during the air raids last year. England's public health in peace time will be greatly improved as a result of wartime needs, he predicted.

Dr. Hudson and Dr. Victor G. Heiser, author of "An American Doctor's Odyssey" and Health Director of the National Association of Manufacturers, were luncheon speakers. Dr. Heiser pointed

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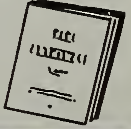

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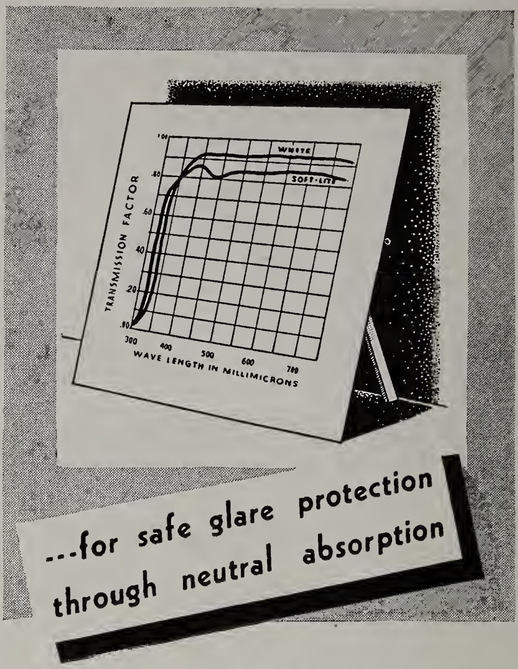
out the contribution to public health which is being made through the establishment of modern industrial hygiene programs by American industry.

In a discussion of "The Control of the Venereal Diseases" Dr. David C. Elliott, of Chicago, regional venereal disease control officer for the U.S. Public Health Service, declared that the serological examinations required by Ohio's new premarital legislation will prove to be as important in educational effects as they are in case-finding. He urged extreme care in standardizing laboratory methods to avoid false diagnoses, and stressed the value of blood tests for patients with gonorrhea because of the common incidence of double infection.

Other conference speakers and their subjects were: Dr. G. Howard Gowan, of the University of Michigan, "Recent Advances Relative to Communicable Diseases"; Dr. John M. Saunders, regional consultant for the Children's Bureau, "The Need for Adequate Local Programs for Mothers and Infants, Especially with Its Relationship to a Defense Program"; Miss Marion Howell, dean of Western Reserve University School of Nursing, "Public Health Nursing in a National Defense Program"; Dr. H. A. Holle, district medical consultant of the U. S. Public Health Service, "Public Health Records and Reports"; Mr. Ellis S. Tisdale, sanitary engineer for the U.S. Public Health Service, "Problems of Sanitation That Are Presented in a National Defense Program"; and Dr. G. Frederick Moench, Delaware County Health Commissioner, "Home Safety".

Director Aszling Participates in Panel Discussion on Health Education

Mr. Richard Aszling, Director of the Bureau of Public Education, Ohio State Medical Association, took part in a panel discussion of "Participation of Professional Groups in Health Education" which was part of the program of the Eighth Annual Institute on Public Health Education held in Atlantic City, Oct. 10 through 14. He reported on exhibits which the State Association has prepared for the State Fair and other gatherings as a health education medium. The panel was led by Dr. W. W. Bauer, director of the Bureau of Health Education of the American Medical Association. Other participants were Dr. Francis F. Borzell, past president of the Pennsylvania State Medical Society; Dr. Lon W. Morrey, director of public relations for the American Dental Association; Thomas A. Hendricks, executive secretary of the Indiana State Medical Association; George B. Larson, acting secretary of the State Medical Society of Wisconsin; Dwight Anderson, public relations director for the Medical Society of the State of New York; J. Louis Neff, executive secretary of the Nassau County Medical Society, and Raymond Greenman, executive secretary of the Monroe County Medical Society.



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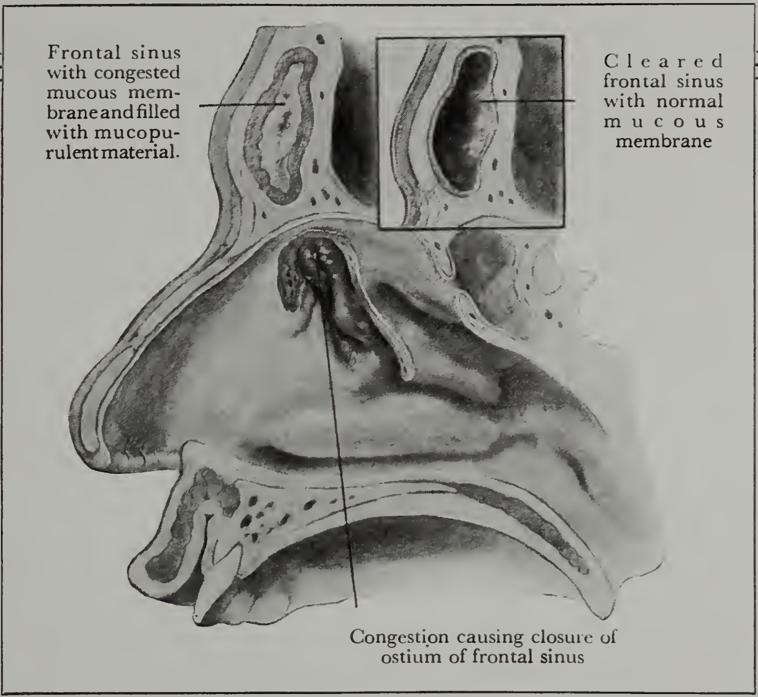
Frontal sinus with congested mucous membrane and filled with mucopurulent material.
Cleared frontal sinus with normal mucous membrane
Congestion causing closure of ostium of frontal sinus

CATARRHAL INFLAMMATION OF THE FRONTAL SINUS

The above illustration demonstrates the route of infection to the frontal sinuses—demonstrates, too, the need for adequate drainage of the area. To shrink congested nasal mucous membranes quickly—to establish adequate drainage with more prolonged effect than ephedrine, may we recommend

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¼% in Ringer's Solution with Aromatics (½ oz. and 1 oz. bottles)
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Buckeye News Notes

Batavia—Dr. A. B. Ream, Mechanicsburg, has been appointed health commissioner of Clermont County.

Canton—Dr. Joseph J. Brumbaugh, first Canton physician to be called to active duty as a reserve officer, has been promoted from captain to major, and named chief of the medical service at the U. S. Army station hospital at San Juan, Puerto Rico.

Chillicothe—Dr. R. W. Holmes has been elected president of the Norfolk and Western Railway Surgeons Association.

Cincinnati—Appointment of Dr. William Graf as special delegate to the Public Health Federation from the Cincinnati Academy of Medicine was recently announced by Dr. John Skavlem, president of the Academy.

Cleveland—Dr. Ina C. Hall, former assistant to the administrator of the University of Wisconsin Hospital, Madison, Wis., has been appointed superintendent of Women's Hospital.

Columbus—Dr. Albert D. Frost spoke on "The Care of Industrial Eye Injuries," at a meeting of the Ohio State Safety Council in Cleveland.

Fostoria—Dr. Howard Holmes, Toledo, spoke on "Tuberculosis," at a meeting of the Junior Hospital Guild of the Fostoria City Hospital.

Marion—Dr. Thomas H. Sutherland has been appointed lecturer in medical law at the Ohio State University College of Medicine.

New London—Dr. W. W. Lawrence, health commissioner of Huron County, spoke on "Tuberculosis," at a meeting of the Pomona Grange.

Portsmouth—Dr. J. W. Fitch has retired as physician for the Home for Aged Women, a service which he had donated for 40 years. He is continuing his regular practice.

Port Clinton—Dr. A. D. Miessner was re-elected president of the staff of Magruder Hospital. Other officers are Dr. C. C. Sheldon, Port Clinton, vice-president, and Dr. George A. Boon, Oak Harbor, secretary-treasurer.

Shelby—Fred W. Ramsey, welfare director for the City of Cleveland, was the principal speaker at the opening of a campaign to raise $75,000 for an addition and improvements to the Shelby Memorial Hospital.

Toledo—Dr. K. C. McCarthy, who recently returned from Great Britain, addressed the Lucas County Hospital Nurses Staff on "Conditions in England Today."

Washington—Dr. James F. Wilson, secretary of the Fayette County Medical Society, recently completed his 15th year as health commissioner of the county.

Zanesville—Staff officers of Good Samaritan Hospital are: Dr. Daniel G. Caudy, chief; Dr. Fred W. Phillips, vice-president, and Dr. R. S. Martin, secretary.

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The Ohio State Medical Journal

Published under the direction of The Council for and by the members of The Ohio State Medical Association, a scientific society, non-profit corporation, with a definite membership, for scientific and educational purposes.

Vol. 37 December, 1941 No. 12

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English Medicine and the War

K. C. McCARTHY, M.D.

DURING the past year I was fortunate to to be able to observe, at close range, the organization of the medical profession in England under wartime conditions. This opportunity came about as follows:

In the fall of 1940, an appeal was made to the anesthetists of the United States for volunteers to work with the American Hospital in Britain, Ltd., an organization financed by the British War Relief Society and headed by Dr. Philip D. Wilson, surgeon-in-chief of the Hospital for Ruptured and Crippled. My application was possibly due to my association with Drs. Fred Clement and Maurice Cooper, who unselfishly offered to carry on my practice for me, and allow me to join the American Hospital in Britain for six months service in England.

CONVOY SYSTEM

We sailed from New York in January on a small Dutch freighter, carrying only 20 cabin passengers. There were three physicians and two nurses for the American Hospital in Britain, five physicians going to join the British Emergency Medical Service under the auspices of the Red Cross, and the remainder were English officials, commercial travellers, and ladies returning to England, having taken children out to the United States. We stopped at Halifax, where we picked up a party of Canadian engineers going to England on some project, very secret, dealing with munitions. A great many ships of all nationalities were waiting here for convoys. We joined one consisting of 25 merchant ships escorted by three corvettes, small patrol ships like pocket-size destroyers.

The whole fleet surrounded a big passenger liner, heavily armed, that acted as an auxilliary cruiser, and we set out for England. The voyage was uneventful, but long and deadly dull. The convoy had to adjust its pace to that of the slowest ship; a course was set that skirted Newfoundland, Greenland, Iceland, and the Faroe and Orkney Islands to the Hebrides. We were 25 days at sea. There were three sharp storms that further delayed us by scattering the convoy. This made it necessary to wait for it to be reassembled, and there were always a few ships that failed to show up. Eight were missing when we reached Glasgow, and what their fate was we never found out. There evidently were some enemy submarines in the vicinity, for one morning a number of depth charges gave us quite a shaking. However, nothing was actually seen of either submarine of enemy aircraft.

To understand the medical situation in England at the present time, it is necessary that one study the organization of the Emergency Medical Service, which was formed to deal with the problems arising from the war, and serve as a means of

The Author

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Note—One of a series of medical literary essays submitted at the request of the Editor.

co-ordinating the efforts of the medical profession. The country is divided into sectors, each one being a self contained unit, under a full time director who is responsible to the director-general of medical services under the Ministry of Health. The medical center for each of these sectors is the base hospital, situated in a rural area that is supposedly safe. Most of our air-raid casualties came from the larger cities, as raiding has been concentrated almost entirely on the more populous centers. The base hospital is completely equipped to care for all types of cases, and besides general surgical services may have special units for chest surgery, brain surgery, orthopedics, peripheral nerve and facio-maxillary surgery. They have a full time staff of attending physicians and surgeons, specialists and house men, employed and paid by the Emergency Medical Service.

BASE HOSPITAL

I was assigned to the orthopedic unit of the American Hospital in Britain, which was stationed at Basingstoke, in Hampshire. We were given wards in the base hospital for Sector Six, which included southwestern London, Portsmouth and Southampton. Most of our air-raid casualties were from these cities. Civilians and service cases are not separated; the former had the greatest number of bomb injuries, while the latter had received most of their wounds in traffic accidents.

The hospital was a huge rambling affair, prominently situated on a hill about two miles out of town. It would make a fine target, but had never been attacked. Rumor is that the Germans are saving it to use as a barracks when they occupy the country. It was formerly a mental hospital, but no one knows what has become of the mental patients. It consists of some 35 two-story brick buildings most of which were connected by roofed but not walled passages. There was accommodation for some 1700 patients, and it was three-quarters full. There were about 50 patients to each ward. In charge of each ward was a most efficient graduate nurse, called a "Sister". She had under her a "Charge" nurse, another graduate, and they were assisted by three or four student nurses from the London hospitals. There were also a number of "V.A.D.'s" assigned to each ward. These are voluntary workers with only a small amount of training, but intelligent girls working in this capacity can be of great help. They do work comparable to our "Nurse-aids".

There were four surgical services, three of which are staffed by men from various London hospitals, mostly St. Mary's. They acted as a unit, and had their own wards, house surgeons, and operating theatre. There were three full time, and two part time anesthetists; the house surgeons do many of the more minor cases. There were very well equipped departments of pathology and roentgenology, and in fact, no obvious shortage of any essential equipment, drugs, or supplies. We Americans had the other surgical service, and the set-up was typical. We had six wards and our own operating theatre. This was a large octagonal room that had been used for hydrotherapy. It had tiled walls and linoleum on the floor. The baths and showers had been removed, and modern sterilizing and operating-room equipment installed. There was a mobile X-ray unit, and an adjacent dark-room. The theatre was piped for nitrous-oxid and oxygen, and there were two Boyle's machines in each room, so that one anesthetist could supervise two tables should that need arise. Nitrous-oxid was plentiful, though there was often some delay in filling orders due to transportation difficulties. There was also a great shortage of cylinders as no new ones are being made, and a great many were left behind at Dunkirk. Cyclopropane is not supplied by the government, but can be obtained, although it costs twice as much as it does here. Supplies must be ordered well in advance of requirement.

Pentothal is a favorite anesthetic for minor cases, and is also being used by some men for more prolonged operations, such as brain surgery, and a number of ingenious devices have been made for the prolonged and continuous administration of this drug. Nitrous-oxid plus ether is the most popular anesthesia for routine major surgery, although sometimes nitrous-oxid is reinforced with chloroform. Open ether was very seldom seen, though sometimes it was used to maintain anesthesia after induction had been carried out with gas given by Clover's inhaler. Spinal, local or regional blocks were rare.

PLASTIC SURGERY

At our hospital Sir Harold Gilles, the famous facio-maxillary surgeon had his headquarters, and had a large unit for the repair of facial injuries and other plastic surgery. Much skin grafting was done in the presence of very gross bacterial contimination. For example, the cast would be removed from a compound fracture, uncovering a large granulating wound, dripping with pus. Most of the granulation tissue would be cut away, the wound dusted freely with sulfonamide powder, and covered with a razor or dermatome graft. The cast would be reapplied, and a 70 to 85 per cent take would be expected, greatly shortening the period of hospitalization. As hemorrhage was very annoying in facial repairs, epinephrine solution would be injected subcutaneously along the line of incision to control bleeding. Many very ingenious operations were developed for the repair of face wounds, which were common among aviators. Altogether, beautiful work was done in this clinic.

Many compound fractures were treated by external skeletal fixation by the double pin method of Roger Anderson. This had a number of important advantages in war surgery, for by making patients ambulant, nursing care was decreased and it made the evacuation from a bombed hospital possible, whereas it would be very difficult if bed traction were used. It was my impression that convalescence was shortened. This method was extended to the treatment of fractures of the small bones, such as the phalanges, clavicle, and mandible, resulting in an anatomical reduction with less limitation of movement. Sulfanilamide, locally and by mouth, was used freely in the treatment of open reductions. The patients were kept at the base hospitals till they were fit to be discharged to convalescent homes, usually large country houses that have been offered by their owners and accommodating from 10 to 50 patients. Here a local physician makes daily calls.

CASUALTY HOSPITALS

The base hospital receives its patients by motor ambulance from casualty hospitals in the cities of its sector, which are subject to enemy action. These hospitals are the usual civilian hospitals of the community and are where the real action is seen. Operating theatres are usually set up in the basement, protected by sandbags, and with emergency lighting equipment, so that they can carry on under the most adverse conditions. Casualties are brought in directly from the scene of action, or from first aid posts. Minor injuries are treated immediately, and the patients evacuated to reception centers, often set up in schools or churches, where they are fed, clothed and housed temporarily until the billeting authorities can find new homes for them. Those more seriously injured, that require treatment for shock, go immediately to the resuscitation wards, where they are warmed up, given oxygen by a mask and bag apparatus, and blood transfusions, if necessary. A good stock of plasma and serum is kept on hand, and is constantly replenished by donor centers established in all the large cities.

After shock has been combatted, emergency surgery can be performed. Abdominal injuries are operated upon as soon as possible. Wounds are debrided, packed with sulfanilamide and sutured without drainage. Compound fractures are debrided, also packed with sulfanilamide, sutured, reduced and unpadded plaster casts applied. If they cannot be completely closed, vaseline gauze packing is used. These casts are not disturbed for six or eight weeks; they become saturated with pus; it is an understatement to say that the odor is strong; but I was amazed to see how healthy the wounds appeared when the casts were removed. Remarkably few amputations were necessary.

Chest wounds are treated by mobile units that travel from one hospital to another. Severe head injuries are usually sent immediately to the special centers for the treatment of these conditions. It is the aim of the casualty hospitals to evacuate their patients to the base as soon as they can be moved. They must not allow their beds to get filled up, or they may be unable to care for an additional flood of casualties. These hospitals often work under extreme pressure, sometimes the staff is on duty continuously for as long as 48 hours. These peak periods will be followed by slack intervals when there is no raiding, and there is very little to do, as most of these hospitals are in constant danger of destruction from enemy action, and do not accept any of the patients that would ordinarily constitute their clientele unless they are real emergencies. Many have been bombed, but carry on their work in spite of the greatest difficulties. The London Hospital, for example, has been hit 21 times, but is still carrying on at about one-third capacity. Some have been so badly damaged that they have been abandoned, but all have set up temporary annexes in the country so that they can preserve their organization for after the war. Most of the work is done by the house staff, which in England takes much more responsibility than is allowed here. They are supervised by the attending men who also do most of the major surgery. Senior men are on a voluntary basis, and usually on duty one day a week. If there is great pressure, they will usually attend out of turn and help. Many tales of heroism are told, and a number of doctors and nurses in these hospitals have been decorated for bravery under fire.

FIRST AID POST

The First-Aid Post is the front line trench for this modern medical warfare. These are established in convenient locations throughout the city, and are prominently marked so that walking wounded can find them in the black-out. They are staffed by voluntary first-aid workers, and trained and supervised by a physician who usually is in attendance during raids. Here diagnoses are made; the living are separated from the dead, hemorrhage is controlled, morphine given, temporary splints and dressings are applied and those requiring hospital treatment taken immediately to the casualty hospital. Transportation is by motor ambulance, and many private cars have been transformed into temporary ambulances for this service, so that each post may have some transport. If, as has frequently happened, the first aid post is destroyed, mobile units are available to replace them, or to assist if they have more work than can be handled. These operate from the hospitals and have a physician, nurses, and lay first-aid workers. Some have well equipped motor cars for this purpose.

Operating from the First-Aid Post are several stretcher parties who actually pick up the casualties at the scene of action in their districts. It is interesting that the stretchers are all of steel construction. No canvas is used as it could become impregnated with mustard gas, and burn those carried on them. They are aided by rescue parties who have special equipment for locating the injured and for digging into debris, moving or cutting beams and girders, and otherwise, extricating victims that have been buried by falling buildings. Often many hours work is necessary before they can be freed; frequently, they will have expired, but in spite of the chaos all around, these volunteers carry on.

BOMB INJURIES

The type of injuries seen as a result of air-raids varies somewhat according to the type of bomb used. The commonest is the high explosive. These vary considerably in size, can be aimed rather accurately, and when dropped usually penetrate buildings or the ground before exploding. Wounds from this type of bomb may be crush injuries, caused by being buried in debris from the collapse of houses, or superficial wounds from flying bricks and fragments of the bomb. Multiple wounds from flying glass were very common, as a good sized bomb would blow in all the windows for blocks around. Paper is pasted over window glass, or shutters used to minimize these injuries. Crush injuries produce what is called the crush syndrome, characterized by supression of urine and kidney failure, apparently due to an intoxication from traumatized tissue. The larger bombs caused many casualties from "Blast". The terrific rush of air produced by the explosion is sufficient to rupture the lungs, producing pulmonary edema, or serious damage may be done to the central nervous system with symptoms suggestive of intracranial hemorrhage. Some of these nervous manifestations may be due to an asphyxia secondary to the pulmonary damage. Due to penetration of buildings the damage resulting from the ordinary high explosive bomb is somewhat limited. Therefore, the Germans have evolved a most destructive type of bomb called the land mine. This is very large, usually over a ton in weight, and is not dropped, but lowered rather slowly by parachute. No great accuracy is possible, but as it explodes on contact and does not penetrate, the blast effect is terrific. All houses will be destroyed over an area of several blocks, and windows will be blown out for a mile around. From personal experience, the blast can be distinctly felt over 40 miles away. This type of bomb causes much property damage and heavy casualties.

The small incendiary bombs which were showered on London by the thousands, caused enormous damage by fire, but can be dealt with quickly and efficiently by well organized fire-watchers. They do not explode, and about the only resulting wounds are burns, though we had a number of injuries received by amateur firemen, who collided with lamp posts and pillar-boxes in the black-out while hurrying to quench incendiaries.

The principal defense against bombing is the system of air-raid shelters and warnings. Raids used to cause great disruption of the life and work of the country, but now a corps of observers have been organized and a system of warnings worked out so that people go to the shelters only if the enemy are directly overhead, and danger of attack imminent. The London Subway system makes a splendid air-raid shelter, as the stations must be nearly 100 feet under ground, and safe from nearly any kind of bombing. Triple decker cots have been set up throughout the whole system, and about 300,000 people can be accommodated at one time. Additional tunnels are being dug, and it is hoped that this winter the capacity of the subway shelters will be about doubled. After the war these new shelters will be used as an extension of the subway system. Though crowded, these shelters are not nearly as bad as I had expected. An efficient forced air ventilating system keeps the air fairly fresh, and the people were very well behaved and orderly.

AIR RAID SHELTERS

Modern buildings of steel frame or reinforced concrete construction are very resistant to the ordinary bomb, which usually will not penetrate more than two or three floors. Shelters in the basements of these buildings, protected by sandbags or brick blast walls over windows, give fairly safe accommodation to quite a large number. The hotels have cots in their basement shelters with one's room number on it, and if a raid suggests that safer quarters be located, one picks up pillow and blanket, and descends to one's own cot in the cellar. The common shelters seen throughout the residential districts are called surface shelters, and are small brick houses without windows, set up in the street. They are about 10 by 20 feet in area, have a reinforced concrete roof, and accommodation for 50, seated on benches around the wall. They offer fairly good protection against blast and flying fragments, but would be demolished by a direct hit. Indoor "table shelters" are now coming into use. They are strongly constructed steel tables, about the size of a double bed. They are set up in the cellar, or on some other firm floor over a mattress on which several people can sleep. A number of cases have been reported where the whole house has come down on these shelters without harm to those beneath.

GAS

There have been no casualties due to poison gas, although the government apparently expects that it will be used by the enemy, for constant efforts are being made to induce the public always to carry their gas-masks. Children are not admitted to school without one, and workmen in many factories must show their respirator as they check in. Everyone in the armed forces and other government services must have their gas-mask with them at all times. No compulsion has been used on the public as yet, but the authorities have surprise gas tests from time to time. Tear gas, which though annoying, is harmless, is liberated in certain districts, and is very embarrassing for those caught without respirators. Every man, woman and child has his own respirator, which vary slightly in design, though apparently not in efficiency, according to whether they are to be used by the services, civilians who must work in gas, or the general public who are expected to evacuate the gas contaminated areas as soon as possible. In addition to the constant educational campaign, decontamination centers have been set up in connection with many of the First-Aid Posts. Here specially trained personnel are stationed, and equipment is available for cleansing the clothes and persons of those who may have been exposed to gas. Oxygen therapy equipment is available at all hospitals for the treatment of gas casualties.

DIET

No cases of deficiency disease were seen, though it seems as if they would be inevitable with the restrictions in diet necessary due to the ever tightening blockade. Fish, bread, beans, potatoes and cabbage were unrationed and plentiful, but everything else was rationed, scarce or absent. Citrus fruits were nonexistent, and the ordinary local fruits so expensive that they would be out of the reach of most. Peaches, for example, were 75 cents each, and tomatoes 50 cents a pound. Canned fruits are becoming very scarce, and have practically disappeared in many localities. Dairy products are so strictly rationed that the individual gets rather inadequate amounts. Milk is limited to one half pint per day, cheese two ounces a week, eggs three a month, and butter two ounces a week. This is supplemented with an equal amount of margarine. Meat works out to about one pound per week. Certain other meat products are not rationed, and though theoretically plentiful, actually are difficult to get and require tedious queueing at the shops. These products include game and poultry, "offal" that is tripe, sweet-breads, brains, etc., horse-meat, and sausage to which considerable bread-crumbs have been added. Fresh vegetables are scarce in the cities, but can be obtained. The government has tried to prevent vitamin shortage by sponsoring a "National Flour" which is ground from the whole wheat, and fortified by the addition of calcium, and vitamins B and D. Time will tell how successful this is.

DISTRIBUTION OF PHYSICIANS

The medical situation seems to be well in hand at the present time. Certainly, there is no shortage of doctors, though they may be distributed badly. No doubt some physicians are overworked, in areas that are overcrowded with many evacuees. On the other hand, doctors in the larger cities, from which many people have been moved, often have little to do. This is particularly true of London, where the fashionable Harley Street practitioner has suffered severely, and numbers have been glad to accept salaried positions with the Emergency Medical Service. The amount of work thrown on the medical profession as a result of the war has been much less than anticipated. Epidemics were foreseen due to the disruption of sanitary facilities, and over-crowding in air-raid shelters, but so far, none have materialized. Casualties from enemy action in the services and the civilian population have been far less than expected. During the past year in which the country has been subjected to intensive attack, there have been about 100,000 casualties among civilians of which a little over 40,000 were fatal. Approximately one-sixth were children. Military casualties have only been about half as many. Due to the improvement in air-raid shelters, air and anti-aircraft defenses, and particularly in improved methods of location of enemy air-craft, casualties should not be higher if raiding is resumed on an intensive scale. Many physicians have been taken into the army, but approximately half are engaged in administrative, clerical and office duties that could be done as well by non-medical personnel. To the unbiased observer there does not seem to be any crying need for American medical aid in the near future.

MORALE

The morale of the people remains good in spite of the battering their cities have received, absence of military success, and disappointment incurred by the lack of the much promised aid from the United States. They feel that they have taken the worst that the Germans can give, and are far from defeat. There is much evidence that a resolute invasion attempt was repelled last September with heavy casualties, and defenses are much stronger now than they were then. The Royal Air Force is increasing in strength and carrying the war into the enemy's camp. The unexpected strength shown by Russia has been very heartening, and given a much needed respite to re-equip the army following the disastrous Eastern Mediterranean campaigns. The greatest contribution to the British morale, however, has been the leadership of Winston Churchill. The inspiration of their leader is worth more than an army, the country is united 100 per cent behind him, and when he says that they will fight on the beaches, the streets, the fields and hills; they will never surrender, though the whole island be overrun and starving, and will continue the struggle from overseas till victory finally crowns their efforts, it seems as if he expresses the will and speaks for the whole British people.

2228 Ashland Ave.

Tularemia and Its Treatment With 'Lyovac' Antitularemic Serum

G. EDWARD MARR, M.D.

TULAREMIA has been defined by Francis[1] as "an acute infectious disease caused by Bacterium Tularense and occurs under natural conditions in over 20 kinds of wildlife, especially in wild rabbits and hares. Man becomes infected by contact of his bare hands with the raw flesh and blood of these animals or by bites of bloodsucking ticks and flies which have previously fed on animals infected with Bacterium Tularense."

Once considered wholly an American disease, tularemia has been found to be widely distributed throughout the world, no less than 10 foreign countries reporting cases in the medical literature.

Martin,[2] in 1907 reported the first case of tularemia in man, and attributed this infection to the skinning and dressing of wild rabbits. McCoy and Chapin,[3] in 1912, isolated an organism from ground squirrels dying from a "plague-like" disease in Tulare County, California and named the organism Bacterium Tularense.

Francis,[4] in 1919, while investigating human "deerfly fever" in Utah, established identity with the plague-like disease of rodents, and named this entity tularemia.

The incidence of tularemia has increased tremendously, possibly due to more accurate diagnostic aids and most certainly due to the increased knowledge of the disease. Up to 1925, only 15 cases had been reported and to 1932 only 905 cases in the entire U.S.A. In 1938, 2088 cases with 139 deaths occurred and in 1939, 2200 cases with 150 deaths.

B. tularense is usually carried from animal to animal by deer flies, ticks, lice or fleas. Man may contract the disease from insect bites, or by contact with an infected animal, through the respiratory or alimentary tracts or even through the unbroken skin; man to man transmission is unknown. Skin infections usually begin with a small papule which develops into an ulcer at the point of infection, followed by swelling of the regional lymph glands. Fever of typhoidal type follows, with symptoms of chills, sweating, headache, vomiting, malaise and prostration. The acute symptoms last about three weeks and convalescence with weakness and disability may last two to three months. The mortality rate is 5 per cent.

Gross pathology is usually seen in the regional lymph nodes, spleen, liver and lungs. The nodes are enlarged and caseous. Liver, spleen and lungs are enlarged and usually show focal areas of necrosis and abscess formation, giving a characteristic yellow studded appearance.

Clinical types include ulceroglandular type, in which the primary lesion is a papule of the skin which later ulcerates and is accompanied by enlargement of regional glands. This type also includes cases of pulmonary and meningeal forms, nearly all of which present evidence of a skin route of infection.

Second, there is the occuloglandular type, in which the primary lesion is a conjunctivitis accompanied by enlargement of the regional lymph nodes.

Third, the glandular type in which there is no primary lesion at the site of infection but there is an enlargement of regional nodes.

Fourth, the typhoidal type in which there is no glandular enlargement or primary lesion.

The diagnosis is dependent on: (1) a careful history of possible contact with infected animals or bites from infected vectors; (2) an indolent ulcer which does not respond to ordinary therapy, plus enlargement of regional nodes; (3) Foshay[5] intradermal bacterial antigen read 48 hours after injection is highly specific and is positive as early as eight hours after the original chill, 7 per cent showing falsely negative results in the first six days of the illness; (4) antitularemic serum diagnostic skin test read 20 minutes after injection is likewise specific, as above, although normal equine serum must be run as control to skin sensitivity. (5) The agglutination test is equally reliable but does not become positive until two to four weeks after the onset.[6] It is therefore of no value for early diagnosis, as intelligent use of antitularemic serum depends on early and positive diagnosis, prognosis varying with length of time following onset. B. abortus and B. melitensis occasionally cross agglutinate with B. tularense, but higher titers easily distinguish the two entities.

A differential diagnosis should include suppurative staphylococcic and streptococcic infections with regional lymph node involvement; influenza; septic infections; typhoid fever; pneumonia; tuberculosis; Brucellosis; Rocky Mountain spotted fever; sporotrichosis and syphilis.

Therapy consists of prophylactic rubber gloves while handling or dressing animals, rejection and elimination of animals with abnormal spotty appearing livers and spleens and thorough cooking

The Author

● Dr. Marr, Hamilton, Ohio, is a graduate of the University of Louisville, 1936; Member Union District Medical Society of Indiana; member of staffs of Mercy and Fort Hamilton Hospitals.

Submitted August 19, 1941.

of all wild game. Important is the removal of blood from the hands with strict disinfection of all scratches, bites, cuts and punctures. Isolation or quarantine is unnecessary as it is not transmissible from man to man.

Symptomatic therapy consists of rest in bed, good nursing care, and supportive treatment for the pain and swelling of extremities and lymph nodes. Surgical drainage of fluctuant lymph nodes and early X-ray treatment to local lesions have produced good results.

Specific treatment consists of Foshay's antitularemic serum which is the most effective means of therapy. Pessin[7] reports that, "according to Foshay, not a single fatality occurred in 350 patients treated with antiserum on the basis of mortality rate; there would have been 22 deaths had serum been omitted." Simpson[8] emphasized the fact that Foshay's antiserum produced a prompt and favorable influence on the fever and lymphodenopathy and stated that "when the results in a series of cases in which serum treatment is administered are compared with those in which no such treatment is given there is little doubt as to the efficacy and specificity of the serum treatment."

Foshay,[9] presenting 600 cases of acute tularemia, 431 of which were controls, reports that specific antitularemic serum caused diminution in and shortening of duration of symptoms due to toxemia—headaches, fever, arthralgias, myalgias, nausea, vomiting; amelioration and lessened duration of pain in primary lesions and in buboes; marked and rapid cessation of symptoms in typhoidal type; slowing and cessation of pneumonic areas with absence so far of complications and sequelae of pneumonia; no mortality in adequately treated patients with pneumonias in the absence of (a) tularemic septicemia and (b) preexisting disease; failure of septicemia (the chief node of death) to develop after serum administration.

Following is a report of a case treated with 'Lyovac' antitularemic serum:

J. S., a 25-year-old white male, became ill on November 24, 1938. He complained at that time of sore throat, headache and general malaise, anorrhexia and nausea, chills and fever, and dull pain in his left lower chest with a dry, nonproductive cough.

Physical examination revealed the following positive signs and objective symptoms: The patient was a well nourished and well developed white male lying in bed, appearing acutely ill and prostrated with a temperature of 101.8 F., pulse 106, and respiration 22. His tongue was coated, breath foul and pharynx injected. Respirations were costo-abdominal in character with bronchial breathing, scattered piping and sub-mucous râles and isolated areas of dullness to percussion throughout the left chest, particularly over the left base posteriorly. The skin was hot, dry and flushed. Diagnosis: Acute bronchitis with mild broncho-pneumonia. The patient was placed on the regimen indicated and was not heard from until a week later. In the interim he had begun to expectorate a moderate amount of thick yellowish phlegm, and there had developed a match head size pustule on the dorsum of his second right finger over the distal phalanx with barely palpable, nontender right axillary glands. The physical findings were otherwise unchanged. At this time a history of having skinned and cleaned rabbits a week prior to the onset of the present illness was elicited.

The patient was hospitalized on December 1, 1938. Laboratory findings on admission were as follows: Blood pressure 116/60. Urine entirely negative. Hb. 84 per cent. R.B.C. 4,270,000. W.B.C. 10,200; polymorphs 83 per cent; lymphocytes 17 per cent. Sputum examination was negative for tuberculosis and pneumococci. Intracutaneous tularemia test with Foshay vaccine strongly positive. Kline and Kahn tests negative.

The temperature fluctuated between 101 and 103.2 F. during the first three days in the hospital. On December 4 half an ampoule of 'Lyovac' antitularemic serum was given intravenously at 12:30 P.M. and the remainder was given at 8:30 P.M. on the same day. There was no reaction other than profuse diaphoresis following each dose of serum, and a rise in temperature to 104 F. following the second dose. During the night the temperature fell to 103 F.

On December 5 another ampoule of 'Lyovac' was given intravenously in two doses, at 4 P.M. and 9 P.M. respectively, each dose being followed by diaphoresis and a drop in temperature from 103.2 to 98.2 on the following day, December 6. The temperature fluctuated between 98.2 and 101.4 on December 7 and 8 and at the time of the patient's dismissal on December 9 was 98.2.

Medication, other than the antitularemic serum, was symptomatic during the hospitalization. Convalescence following discharge has been rather slow to date, the patient still complaining of dry cough and daily temperature rise to 100 F. Stereoscopic chest plates taken on January 21 reveal a small amount of fluid in the left base with pleural thickening; considerable bilateral peribronchial thickening and many old glands about the hila with no evidence of recent activity.

Pustule on the patient's finger slowly disappeared without suppuration following administration of the antiserum.

Final diagnosis: Tularemia: ulcero-glandular and pulmonary form.

CONCLUSIONS

1. The incidence of tularemia is increasing.
2. Early diagnosis is simple and available.
3. At present the most efficacious therapy is 'Lyovac' antitularemic serum.

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A Medical Review of 311 Cholecystectomies and the Importance of Diagnostic Non-Surgical Biliary Drainage

AUGUSTUS A. HALL, M.D., F.A.C.P.

DURING the last decade surgeons familiar with biliary tract surgery have come to realize that most of the morbidity following cholecystectomy comes in the cases with a stoneless gallbladder. Ivy,[1] Rost,[2] and Alvarez[3] have emphasized this point. This recognition has led to a decrease in the number of stoneless gallbladders removed at operation. It also offers a real challenge to the physicians who see these patients years before a surgical crisis appears.

Ivy has carefully reviewed the available data on the subject of cholecystectomy and has concluded that "the gallbladder is a factor of safety in physiological economy". If this is true, and I believe it is, the normal organ should not be removed with the same impunity that one would remove a so-called chronically diseased appendix.

Brown[4] of Chicago says that "removal of the gallbladder does not necessarily bring relief to patients with chronic gallbladder disease especially if associated with pancreatitis, unless colic and intermittent obstruction has been the predominant clinical picture". In his opinion routine cholecystectomy is an unwarranted procedure.

In 1937 Wilkinson[5] of Boston reported that of more than 1000 consecutive gallbladder operations at the Lahey Clinic, 90 per cent were for gallstones and 10 per cent for disease without stones. In the non-calculous group 30 per cent of the patients had some other organic process to account for the symptoms, 42 per cent had normal gallbladders, 42 per cent required dietary care to be comfortable after operation, and 31 per cent were unimproved.

Evarts Graham[6] of St. Louis states that in the absence of severe pain the beneficial results to be obtained by cholecystectomy in cases of a stoneless gallbladder are likely to be unsatisfactory in about 40 per cent. He further states that to arrive at a satisfactory incrimination of the gallbladder it is necessary to examine the patient thoroughly with reference to the possibilities of other sources of the complaints, and so far as the gallbladder itself is concerned it is necessary not only to take a very careful clinical history but also to resort to the various special methods of examination. To further emphasize this statement, in a previous paper[7] we stated that five methods of examination were vital to the accurate diagnosis of gallbladder disease. They are a careful history, a thorough physical examination, certain laboratory tests, cholecystography, and diagnostic non-surgical biliary drainage.

In an attempt to throw some more light in this direction, all of the cholecystectomies performed in Grant Hospital, Columbus, Ohio, from 1935 to 1939 inclusive, were carefully reviewed with the exception of their postoperative morbidity. There were 311 consecutive operations. Of these, about 80 per cent were females and 20 per cent males. The average age at operation of the males was 49.7 years and the females—47.3. In this series of 311 cholecystectomies there were 24 postoperative deaths. This represents a mortality of 7.71 per cent. This is a good record of surgical skill from the standpoint of mortality. In the literature the mortality runs from 2.6 per cent in a few highly organized clinics to as high as 25 per cent in places where surgery is performed by the inexperienced biliary tract surgeon. This study is also of interest because the series of operations performed were done by a large group of individual surgeons and not by a single team.

Of all 311 cases, 236 or 75.88 per cent were calculous and 75, or 24.12 per cent were non-calculous. In other words only one out of every four gallbladders removed was stoneless. It is interesting to note that in 279 of the cases in which the surgeon noted the presence or absence of deforming adhesions there were 100 positives or 35.8 per cent.

There is a mass of clinical evidence establishing the relationship between true cholecystitis and appendicitis. Some of the physicians contributing to this study were Rosenow,[8] Heyd,[9] Deaver,[10] Mayo,[11] Latham and English.[12] Rivers and Hartman[13] found that 31.8 per cent of 879 patients operated upon for true cholecystic disease had acute or chronic appendicitis. Draper[14] reported in 1936 that 40.6 per cent of his patients with operative cholecystitis and cholelithiasis had concomitant appendicitis. In this series under

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Submitted July 24, 1941.

discussion there were 266 cases in which the surgeon and the pathologist reported a concomitant appendicitis.

It is essentially true that the majority of patients with resultant cholecystectomy begin as "medical" cases and terminate as chronic cases needing surgery because they remain unrecognized or, worse still, inadequately managed. Keeping this in mind, 259 of the 311 cases that had dependable histories were reviewed to determine how long the patient had symptoms prior to the operation. Chart 1 gives a condensed outline of findings. It is a challenging fact that 55.1 per cent of the female cases had their symptoms from one to fifteen years. Only 19.1 per cent of the female cases had their symptoms less than three months. The male experience was relatively the same. Many of these patients had long "breeding" stages of gallbladder disease. The early breeding stage of cholecystic disease is the time when all-out effort should be made medically to correct the condition.

CHART I

Onset of Symptoms Prior to Operation

Time	Female		Male	
	Cases	Percent	Cases	Percent
1 day — week	10	4.8	1	1.9
1 week — 1 month	10	4.8	4	7.8
1 month — 3 months	20	9.6	5	9.5
3 months — 6 months	12	5.7	2	3.8
6 months — 1 year	14	6.7	7	13.3
1 year — 5 years	68	32.7	16	30.4
5 years — 10 years	30	14.4	5	9.5
10 years — 15 years	17	8.1	2	3.8
15 years — 20 years	8	3.8	2	3.8
20 years — 25 years	5	2.4	0	0.0
25 years — 30 years	6	2.8	3	5.7
30 years plus	4	1.9	4	7.8
Total number of cases studied				259
Female				208
Male				51

The theories of gallstone formation are numerous and cannot be reviewed here in detail. Suffice it to say that the problems of infection, metabolism, and stasis play an important role. One of the more recent ideas was expressed by Dolkart, Lorenz, Jones and Brown.[15] Their experiments confirmed previous work which showed that the fatty acids in bile are important aids in holding the cholesterol in solution. All this emphasizes that many of the patients whose gallbladders were removed might have been saved for physiologic economy if they had been diagnosed earlier during the breeding stage of their biliary tract disease and proper treatment instituted.

Of the 311 cases 72 had records of cholecystography. The rest were cholecystographed before entering the hospital and the records were not available. Of the 72 cases, 39, or 54.1 per cent were positive for definite gallbladder pathology; 33, or 45.9 per cent failed to visualize. Of the 33 gallbladders failing to visualize, 25 or 75.7 per cent were calculous and eight or 24.3 per cent were non-calculous—practically the same percentages found in the total series. Failure to visualize and faintness of shadow on cholecystography has been a stumbling block to even the originators of the method. Rehfuss[16] has presented the reasons for this very adequately. Anything that interferes with the adequate absorption, excretion, and transportation of the dye will hamper its arrival in the gallbladder with a failure to visualize in the X-ray picture.

What should one do when the gallbladder fails to visualize after a second or even a third attempt? Is this adequate evidence per se to immediately proceed with the removal of the gallbladder? In a good many cases emphatically no. This is the time when non-surgical biliary drainage becomes an important adjunct to the diagnostic armamentarium. Non-surgical biliary drainage is a complimentary examination with cholecystography. When there is a disagreement between the nonvisualized gallbladder of the Graham test and the drainage findings of the Lyon test, caution should be exercised in granting an immediate operative decision. Many times the surgeon will find a normal appearing gallbladder. Often a catarrhal cystic duct is found. A very supportive study in this direction was reported by Giles[17] in 1934. Of 6,953 cholecystograms, 5.4 per cent showed stones and 2,822 or 41 per cent showed non-calculous cholecystitis.

Communications this year from Max Einhorn, of New York, Samuel Morrison of Baltimore, T. Grier Miller of Philadelphia, E. N. Collins of Cleveland, Samuel Weiss of New York, George B. Eusterman and Walter Alvarez of the Mayo Clinic, Leon Schiff of Cincinnati and John G. Mateer of Detroit attest to the great value of non-surgical biliary drainage in diagnosis of biliary tract diseases.

CHART II

Summary of Data

Qualifying observation	Total cases Studied	No. of positives	Percentage
1. Calculous cholecystitis	311	236	75.88%
2. Non-calculous cholecystitis	311	75	24.12%
3. Recognized liver disease	200	22	11.0 %
4. Deforming adhesions of gallbladder	279	100	35.8 %
5. Appendicitis	266	124	46.6 %
6. Pancreatitis observed	91	11	12.0 %
7. Deaths with calculous cholecystitis	24	15	62.5 %
8. Deaths with non-calculous cholecystitis	24	9	37.5 %
9. Operative mortality	311	24	7.71%
10. Positive cholecystograms	72	39	54.1 %
11. Gallbladder failed to visualize	72	33	45.9 %

I have a series of 57 consecutive biliary tract cases each of which received both a cholecystographic study and a non-surgical biliary drainage. Of these cases, 26 or 45.6 per cent failed to visualize. In the 26 cases that failed to visualize the results of the biliary drainage study were as follows: The average amount of gallbladder bile obtained was 53 cc. The average amount of oleaginous degeneration was one plus. (One to four plus basis). Gallstone crystals were found in 27 per cent of the 26 cases. Seven of the 57 cases were the slow-emptying type. The average amount of "B" or gallbladder bile obtained by drainage was 102 cc (normal 30-60 cc). Nine of the cases were judged from the cholecystographic examination to be normal. Only one of these was found to be free from some degree of pathology on being drained. There were five cases, or about 8.7 per cent that were roentgenographically positive for gallstones. Confirmatory evidence was found by biliary drainage in all of these.

Therefore from this review of 311 cholecystectomies it is clear that the early gallbladder case diagnosed during the so-called "breeding" stage should have the benefit of a diagnostic nonsurgical biliary drainage for, as a rule, the history is often confusing, physical examination is reported as negative, the cholecystogram shows good filling, concentrating, and emptying of the dye. The first evidence of pathology will be found in a study of the bile.

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For the relief and protection against sinusitis and nasal allergy no statistical evidence is available to justify any protection by either the removal of the tonsils or adenoids or both organs. In the production of these clinical manifestations the tonsils and adenoids seem not to play any significant part.—Albert D. Kaiser, M.D., Rochester, N.Y.; Minn. Med., Vol. 24, No. 11, November, 1941.

Pruritus

Pruritus ani is an intractable disease of the anus characterized by intense itching, perianal thickening of the cutaneous tissues, and profund nervous manifestations. Some refer to pruritus as a symptom, others refer to it as a definite pathological entity. There is great dissension in regard to its cause. The demoralizing effects are only known by one who has experienced this disease. In the early stages, the patient may be able to control or ameliorate the symptoms by the use of lotions, ointments, and careful cleanliness.

In spite of emphatic statements by various authors in regard to their pet theories, there still is great discussion as to the etiology of anal pruritus, and the variety of methods of cure and remedies offered are proof that there are several causative factors.

Pruritus may be caused by constipation, diarrhea, food allergy, exposure to parasites, personal habits, foci of infection, cryptitis, papillitis, hemorrhoids, mucous colitis, fistula, fissure, and even athlete's foot.

Hill tells of investigative work based upon the concept of relationship between pruritis ani and dermatophytosis, a theory which gradually is being accepted. Hill quotes Dr. E. H. Terrell as saying that such allied skin diseases as seborrheic eczema of the scalp, external auditory canals, and epidermophytosis of the feet must be eradicated before there can be successful treatment of pruritus ani. Hill cites a series of cases with the conclusion that "In the great majority of cases, pruritus ani is the result of a primary invasion by dermatophyton of the perianal tissue; it is a toxic or dermatophytid reaction to a distant focus of this disease, or it may be an allergic manifestation of this or some similar condition." In a series of 201 cases of obvious pruritus ani, 65 per cent of the cases showed primary or distant skin lesions, and 60 per cent of that number showed a coexisting dermatophytosis of the feet.

The patience of both physician and patient often is exhausted before a definite cause for the pruritus can be found, but a definite cause is discoverable in almost every case if sufficient time and effort are devoted to the investigation. Foci of infection should be given attention first, then local symptoms should be cared for. Usually the patient requires immediate relief of his pruritic discomfort—and this may be obtained by the use of the oil anesthetic mentioned previously or by the subcutaneous injection of alcohol. While the patient recovers from his acute discomfort, other factors may be investigated.—Homer H. Wheeler, M.D., Indianapolis; Jour. Ind. S.M.A., Vol. 34, No. 10, October, 1941.

Hemochromatosis

A Case Report

HOWARD M. GANS, M.D., F.A.C.S. AND ARTHUR ADELMAN, M.D.

HEMOCHROMATOSIS is a rare disease of iron metabolism, occurring chiefly, but not exclusively, in the male. Butt and Wilder[1] of the Mayo Clinic collected 30 cases in 15 years; at the Bellevue Hospital in New York, four cases were found in 5000 autopsies; Stewart[2] collected 52 cases from 38,000 admissions. According to Sheldon,[3] in 1935, 311 cases had been reported since Trousseau first described the disorder in 1865. The etiology of the disease is unknown; however, several theories have been propounded:

1. It was first thought that the etiology was diabetes; this is not true, because cases of hemochromatosis have been found where there is no associated diabetes.
2. Some investigators have thought that the condition is due to excessive blood destruction, but none of the cases have anemia and there is no evidence of abnormal hemolysis.
3. It has been thought, but not proved, that it is caused by toxins, such as bacterial, alcohol, lead, zinc, and copper.[4]
4. Hemochromatosis has been explained on a basis of a disorder of iron metabolism. It concerns the inner metabolism of all the cells of the body, and shows itself by the formation of iron-containing pigments in nearly all the tissues of the body. Normally, the body contains about 2 grams of iron; in an advanced case of hemochromatosis as much as 40 grams of iron may be deposited in the body, and as much as 30 grams of this may be deposited in the liver. Normally, we require about 15 milligrams of iron daily; the excess iron taken in is excreted by the intestine and kidneys. Patients with hemochromatosis, for some reason, retain all this excess iron, and for years and years it is deposited in the cells of the body as hemosiderin, until clinical manifestations appear.

The great mass of iron pigment is deposited in the organs in the following order: liver, pancreas, spleen, lymph nodes, heart muscle, adrenals. The pigment is both intracellular and extracellular. The site of election of the pigment is apparently in actively functioning cells of the parenchymatous organs. This phenomenon is accompanied by extensive fibrosis and sclerosis of the tissue subjected to this abnormal deposit of pigment. The changes in the liver bring about hepatic cirrhosis with damage to the portal circulation, with ensuing varices and ascites. The deposition of hemosiderin in the pancreas brings about destruction of the Isles of Langerhans, with fibrosis of the pancreas to produce the associated diabetes mellitus. The melanosis often present is said to result from fibrosis replacement which occurs in the zona glomerulosa of the adrenal. The hemosiderin may also be deposited in the pituitary, and several cases of hemochromatosis with loss of hair and atrophy of the genitalia have been reported,[5,6] probably due to this deposition of pigment.

The symptoms of hemochromatosis are usually referable to the following triad: (1) Bronzing of the skin, (2) Diabetes mellitus, (3) Cirrhosis of the liver. The diagnosis of hemochromatosis is made easily in advanced cases by the above-mentioned triad. In its early stages, however, it offers difficulties. When only one factor of the triad is present, the danger of incorrect diagnosis is increased, and the disease may escape consideration. In the differential diagnosis, argyria, Addison's disease and diseases producing jaundice should be considered. The history, course, and pigmentation of argyria are markedly different from that of hemochromatosis. Chronic jaundice producing diseases should offer no difficulty in the differential diagnosis. Addison's disease has been the most frequently confused with hemochromatosis; however, the laboratory data and distribution of pigment (exposed parts of the body in Addison's disease; generalized pigmentation in hemochromatosis) should differentiate the two. A skin biopsy that discloses iron in the propria of the sweat glands and about the capillaries is considered to be nearly diagnostic.[7] The hemosiderin deposits give a positive Prussian blue reaction for iron.

The treatment of hemochromatosis is the treatment of the associated diabetes. Better control of the diabetes, possible since the introduction of insulin, seems to have lengthened materially the lives of these patients. Formerly they died of

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Submitted August 15, 1941.

diabetes. Now, if death results, it is due to hepatic insufficiency. Wilder[1] reports one case living 13 years after the diagnosis had been made, and numerous cases living three, five, and eight years have been reported.

CASE REPORT

A man, aged 63 years, was referred from the out-patient department to the hospital, Jan. 28, 1941, for repair of an incarcerated right inguinal hernia. The patient had been seen in the out-patient department two weeks prior to admission. At that time he complained of a feeling of discomfort and cramp-like pain in the epigastrium and right upper quadrant of the abdomen, especially after eating. He knew that he had a hernia for the past 12 years, but had had no symptoms until five months ago, when he began to have a little pain and discomfort in the right inguinal region, especially after working.

Past illness and family history were irrelevant. Patient had been a heavy drinker for many years. Review of systems was essentially negative.

Physical examination revealed an elderly white male, rather thin, not acutely ill, and with a peculiar greyish cyanotic color to his skin; there was no clinical evidence of jaundice. Temperature 101.6, pulse 92, blood pressure 165/90, respiration 24. Positive findings were limited to the chest, abdomen, and inguinal region. Examination of the chest revealed a few fine moist rales in the right base posteriorly. Examination of the abdomen revealed slight tenderness and spasm in the right lower to the right upper quadrant; there was no rebound tenderness; no masses were felt; liver and spleen were not palpable. Examination of the right inguinal region revealed a right indirect inguinal hernia with a hard nodular mass incarcerated in the hernial sac; this mass was movable laterally, but could not be reduced; it was not tender to palpation.

Laboratory findings: R.B.C. 4,050,000; W.B.C. 8100; Hb. 80 per cent. Differential count was normal. Blood chemistry was normal. Serology was negative.

In view of the above findings, namely, the fever, tenderness in the abdomen, and recent history of gastro-intestinal disturbance, it was clear that this case was not a simple hernia to be repaired, but rather that there was something else complicating the picture.

Several possibilities were considered in the differential diagnosis:

(1) Incarcerated hernia.
(2) Acute or subacute cholecystitis.
(3) Appendix incarcerated in hernial sac.
(4) Fibroma of cord.
(5) Carcinoma of colon.

Within the first 36 hours after admission, an X-ray of the chest (in view of the rales heard at the right base) was taken, oral cholecystography was performed, and a barium enema was done. The chest plate showed no abnormal findings; the barium enema showed a normal colon and cecum, and showed the appendix uniformly filled and freely movable, thereby ruling out a pathological process of the colon and appendix incarcerated in the hernial sac; oral cholecystography showed no filling of the gall-bladder, with no shadows indicative of calculi.

In view of the above clinical and laboratory findings, the following preoperative diagnosis was made: right indirect inguinal hernia, with a probable fibroma of the cord incarcerated in the hernial sac; hydrops of the gallbladder.

For the first three days in the hospital, the patient's general condition remained about the same as on admission. Three days after admission the temperature dropped to normal and the patient was taken to surgery. Under spinal anesthesia, two separate operations were performed; first, the hernia was repaired; the incarcerated nodule proved to be adherent omentum in the indirect sac. Immediately following the repair of the hernia, the abdomen was opened through an upper right rectus incision. Upon entering the abdomen, the first thing encountered was a considerable amount of thin bloody fluid in the peritoneal cavity. The liver was found to be essentially normal in size; however, it was very hard and had a coarsely nodular appearance; the liver edge was markedly rounded. The gallbladder was markedly distended; stomach and duodenum were normal. The pancreas was found to be very firm. The gallbladder was first aspirated, a thick dark inspissated bile being obtained. After aspiration, no stones could be felt. Cholecystostomy was performed, a biopsy was taken from the liver, and the abdomen was closed. The patient withstood the operation quite well and was taken back to the ward in good condition. Immediate postoperative diagnosis was right indirect inguinal hernia with incarcerated omentum, chronic cholecystitis with hydrops of the gallbladder, and portal cirrhosis of the liver.

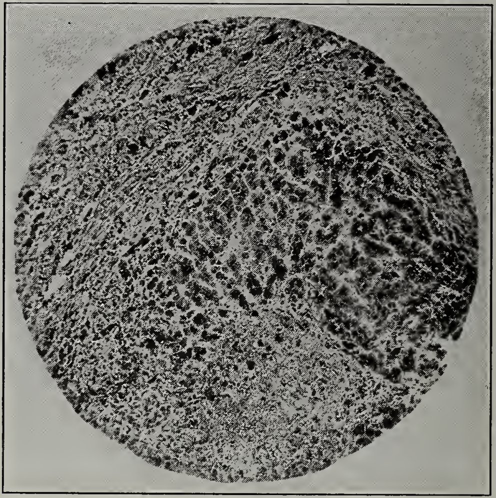

Fig. 1. Photomicrograph showing cirrhosis of the liver, with hypertrophy of the liver cells and deposit of hemosiderin pigment granules therein.

The report from the pathology department on the biopsy of the liver was as follows: the tissue showed a gross and microscopic picture of cirrhosis, showed numerous pigment granules in the cells, and gave a positive Prussian blue reaction for iron, thereby establishing a diagnosis of hemochromatosis of the liver. A biopsy of the skin was then taken, which showed no deposit of hemosiderin in its layers.

For the first two days, the patient's postoperative course was good, with little distension, no vomiting, fluid intake good, and slight elevation of temperature. On the third postoperative day, his behavior took on a change. He became irrational to a certain degree, was quite restless, and several times attempted to get out of bed, so that he had to be restrained. He refused his diet and fluids, so that parenteral fluids had to be given. His abdominal incisions remained good. Urine output was normal. On the fourth day he continued to be irrational. His NPN was 58 at this time. Parenteral fluids were continued. On the fifth and sixth days his condition became worse, he became more uncooperative, NPN was still elevated, and he continued this way, rapidly losing ground. On the evening of the sixth postoperative day he had an involuntary black stool followed by a sudden severe hematemesis, vomiting large amounts of bright red blood. He rapidly developed pulmonary edema, became comatose, vomited blood several more times, and in a few hours expired.

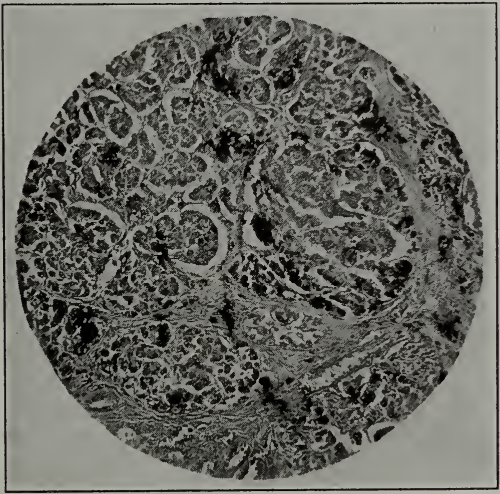

Fig. 2. Photomicrograph of the pancreas, showing increase in fibrons stroma and deposits of pigment in the living cells of the acini.

Postmortem findings were as follows:

Liver: The liver grossly presented a striking appearance. The superficial surface was coarsely nodular, brown, and appeared quite firm. The capsule was opaque and thickened. In the left lobe of the liver was a large depression which was greyish white and firm. On repeated section through the liver, the cut surface presented a coarsely nodular appearance. The liver gave a positive Prussian blue reaction.

Microscopic: Lobulation was irregular. There was considerable increase in fibrous stroma in the periportal areas, a typical picture of cirrhosis. The liver cells appeared hypertrophied and larger than normal. The parenchymatous cells contained abundant greenish brown pigment in the cytoplasm of the cells. A section stained by Nishmura method (HCL and potassium ferrocyanide) showed abundant material in the parenchymatous cells which gave a positive Prussian blue reaction for iron.

Section of the left lobe showed the greyish white depression noted above to be a tumor mass made up of glands of bizarre shape and size, with irregularly shaped cells and hyperchromatic nuclei; adenocarcinoma of the liver.

Pancreas: The pancreas, grossly, appeared of average size. Section through the pancreas revealed much of the parenchymatous tissue replaced by fatty tissue; the pancreatic tissue present was found to have a brown color. It gave a positive Prussian blue reaction.

Microscopic: Lobules were rounded due to increase in fibrous stroma. The acini showed in the lining cells, abundant brown granular pigment. A section stained by the Nishmura method showed abundant deeply blue stained iron pigment in the acinar cells.

Heart: Gross—The heart showed an unexpected and interesting finding. There was old and recent rheumatic valvulitis of the mitral and aortic rings. All valves were anatomically patent with fresh vegetations on the mitral and aortic valves.

Microscopic: The myocardial fibres were hypertrophied, being thicker than normal. There was considerable brown granular pigment in the cytoplasm of the myocardial fibres distributed toward the poles of the nuclei.

Section from this block stained with Nishmura stain showed the granular material to give a strongly positive Prussian blue reaction for iron.

Kidney: Grossly, the kidney was normal.

Microscopic: The tubular epithelium showed markedly swollen cytoplasm, coarsely granular. The brown granular pigment seen in some of the parenchymatous organs was present, but not prominent.

Nishmura stain showed iron pigment, however, in scattered tubules distributed especially toward the basement membrane of the cells lining the tubules.

Mesenteric Lymph Nodes: These nodes, adjoining the pancreas, were firm and on section gave a positive Prussian blue test.

Lungs: Terminal bronchopneumonia, with considerable pulmonary edema.

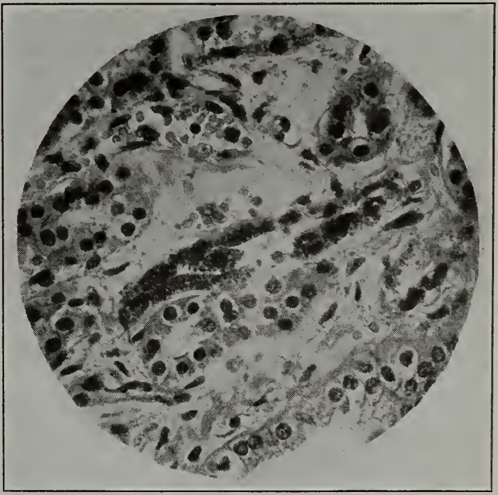

Fig. 3. Photomicrograph of the kidney, showing deposit of hemosiderin granules in the cells lining a tubule, shown in longitudinal section.

Spleen: Hyperplasia and perisplenitis.

Gallbladder: Acute and chronic cholecystitis.

Esophagus: On opening the esophagus, there was a striking picture in which were seen numerous tortuous dilated varicose vessels, extending up into the greater part of the esophagus.

Stomach: Dilated and filled with dark red, partly clotted, partly fluid blood.

Small Intestine and Colon: Filled in greater part with dark red blood admixed with intestinal contents.

FINAL DIAGNOSIS

1. Hemochromatosis with atrophic cirrhosis of the liver, with involvement of the pancreas and regional lymph nodes.
2. Primary adenocarcinoma of the liver.
3. Chronic splenitis and perisplenitis.
4. Terminal bronchopneumonia both lower lobes of the lungs.
5. Acute and chronic cholecystitis.
6. Multiple varicosities of the esophagus.
7. Massive hemorrhage from esophageal varices.

The case presented here is interesting from several viewpoints. The patient came in complaining of a condition entirely unrelated to hemochromatosis, and even after careful examination, the patient was found to have only one of the three factors mentioned above, namely, a discoloration of the skin, which even after biopsy did not show hemosiderin deposited in the layers of the skin. There was no associated diabetes, in spite of the autopsy findings of advanced fibrosis and deposits of iron in the pancreas. There were no clinical findings to suggest cirrhosis of the liver. The involvement of the liver apparently developed more rapidly than the involvement of the other organs, as demonstrated by the formation of esophageal varices. Had the patient not developed a condition necessitating operation, he probably would have gone on to develop a clinical picture of cirrhosis and diabetes. The finding of a primary carcinoma of the liver is not a rarity with cirrhosis of the liver. It is probable that the cirrhosis is primary and that the carcinoma arises from the associated hyperplastic nodules of liver cells. The immediate cause of death in this case was undoubtedly a massive hemorrhage, in the main from esophageal varicosities secondary to the cirrhosis of the liver. The entire picture here was rather complicated at first, but one finding leading to another eventually resolved, clinically and pathologically, a unified case.

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Clinical Observations of Diethylstilbestrol On Menopausal Symptoms

The present study apparently confirms the findings of Payne and Muckle on the effectiveness of small doses of diethylstilbestrol, as determined by relief of menopausal symptoms. However, it does not support their contention that larger doses are required in artificially induced menopause than in the naturally occurring menopause. Diethylstilbestrol was administered by mouth to a series of thirty patients for periods varying from fourteen days to ten months. At the start of this investigation the initial dosage was 1.0 mg. daily. This dosage was reduced shortly afterwards to 0.5 mg. daily. The latter dosage was prescribed for two weeks with instructions that the drug should be discontinued for one day, if nausea developed, and resumed the next day. The initial dosage was considered adequate when the menopausal flushes were held in abeyance. This result usually was obtained within one week. Maintenance dosage was then determined, and in most instances was found to vary from three to seven 0.5 mg. capsules weekly. No consistent differences in the maintenance dosage in surgical and natural menopause were noted. One patient who received only two weeks of treatment remains free from symptoms at the time of this writing, six months later. The largest total amount of the drug given to any one patient was 240 mg. The patient who was given this amount over a period of ten months did not develop any signs of intoxication.

Among the patients included in this series was one with senile vaginitis who experienced relief from hot flashes on a dosage of 0.5 mg. of diethylstilbestrol daily. However, no improvement in vaginitis occurred until the dosage was increased. On a dosage of 1.0 mg. daily for 10 days mature cornified epithelial cells appeared in the vaginal mucosa, and the inflammation subsided. In three other cases not included in this report this larger dosage was necessary to produce objective signs of estrogenic effect as determined by vaginal smears. Although the number of observations are too few to warrant the drawing of definite conclusions, they justify the postulate that small amounts of the drug are sufficient for symptomatic relief. When estrogenic effect on the tissues is desired, however, larger doses are required.—J. William Peelen, M.D., Kalamazoo; Jour. Mich. S.M.S., Vol. 40, No. 11, November, 1941.

Many a case of traumatic neurosis becomes one of professional neurosis.—Fetterman.

Happy is the physician who is called in at the end of the illness.—Rabelais.

Multiple Myeloma

Report of a Case

SAMUEL S. BERGER, M.D., F.A.C.P. AND JOE I. GOODMAN, M.D.

MRS. S. U., a 48-year-old white female was first admitted to the hospital on June 3, 1938, because of a painful swelling at the angle of the left side of the jaw. This swelling which began 10 days before, had become increasingly painful and tender to such a degree that she had difficulty in moving her head from side to side. Two months before the present admission she had been in the hospital because of an upper respiratory infection complicated by a sinus involvement which ran a febrile course. She made an uneventful recovery and at the time of her discharge was entirely free of symptoms. During this admission the presence of a marked hypochromic anemia was discovered but the cause was not accounted for satisfactorily.

In December, 1934, four years prior to this admission, she had a panhysterectomy because of uterine bleeding attendant to the presence of a fibromyoma. At this time likewise the presence of an orthochromic anemia was noted. The red blood count was three million cells per cubic m.m. and the hemoglobin ranged between 55 per cent and 65 per cent. A transfusion was given because of this anemia. Her recovery was uneventful.

Her past history included the performance of a thyroidectomy for hyperthyroidism in 1929. In 1933 she had an attack of Bell's palsy.

During the admission to the hospital which we are describing, in addition to the large tender mass of glands on the side of the neck, a well marked pallor was noted. A few small glands in the axilla and groin were present but the mediastinum was clear and there were no abnormal glands present elsewhere. She had an elevation of temperature which hovered around 102° F. (rectal). At this time there was a red count of three million cells per cubic m.m. and a hemoglobin of 60 per cent. The white count was 7200 cells per cubic m.m. and the differential count showed polymorphonuclear neutrophiles—64 per cent; lymphocytes—27 per cent; eosinophiles—4 per cent; monocytes—5 per cent. There were no abnormal cells in the peripheral blood. (Fig. 4). The platelet count was 82,800 and the

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THIRD ADMISSION

	Sugar	NPN	Creat.	White Count	Diff.
6/6/38	93mg.	32mg.	1.5mg.	7200	P—37%, STABS—20%, METAMYCLOCYTES—1% MYELOCYTES—6%, L—27%, M—5%, E—4%

	TOTAL PROTEIN		BENCE-JONES PROT. (Urine)	BMR	CHOLESTEROL	ESTERS
6/10/38	4.89	Alb.—2.4 Glob.—2.49				
6/11/38			NEG.			
6/14/38				plus 11%		
6/15/38			NEG.		141:9	80.2
6/15/38			Phosphotase—1.98			
6/17/38	8.75	Alb.—1.53 Glob.—7.22				
6/25/38	4.75	Alb.—2.38 Glob.—2.37	NEG.			
6/25/38	5.02	Alb.—2.24 Glob.—2.78				
6/28/38			NEG.			
6/29/38			NEG.			
6/30/38			NEG.			
7/1/38	11.7	Alb.—2.95 Glob.—8.75	NEG.		167	43.98
7/2/38	9.2	Alb.—2.0 Glob.—7.2	NEG. Calcium—8.1mg.			
7/3/38			NEG.			
7/6/38	12.2	Alb.—2.0 Glob.—10.2				

From the Medical Department, Mount Sinai Hospital.

Submitted August 18, 1941.

sedimentation rate was 150 millimeters in one hour. Urinalysis was negative.

At this time the combination of an unaccountable anemia, a large mass of glands and the presence of fever suggested that Hodgkins' disease was the most likely explanation. Lymphosarcoma, tuberculosis and carcinoma of the pyriform sinus were considered in the differential diagnosis. In seeking the cause for the presence of the anemia, a sternal puncture was done. The bone marrow revealed that there were almost 100 per cent plasma cells. Most of these cells were characteristic of plasma cells with an eccentric nucleus, surrounded by a lighter halo. Some of these cells contained nucleoli and many were vacuolated. Occasional cells containing two or more nuclei were seen. These findings established the presence of multiple myeloma. (Refer to Fig. 1—reproduction of bone marrow).

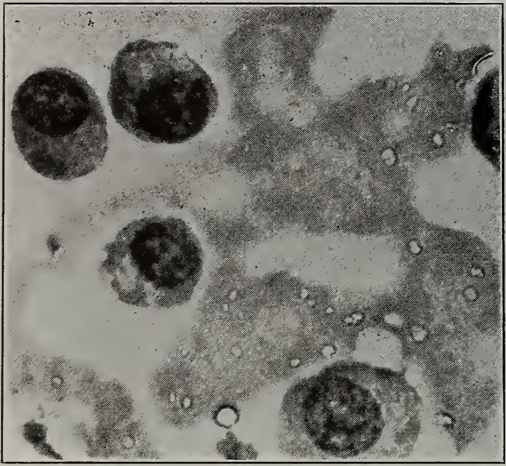

Figure 1. Peripheral blood.

X-rays taken of the skull, pelvis and ribs revealed numerous areas of diminished density throughout these regions as can be seen in Fig. 2.

Throughout the entire course of our observation Bence-Jones protein was not discovered at any time. Total blood protein determination ranged between 4.89 mg. per 100 cc. to 12.2 mg. per 100 cc. The basal metabolic reading was plus 11 per cent. Blood cholesterol was 141.9 to 167 mg. per 100 cc.; cholesterol esters varied between 43.98 mg. to 80.2 per 100 cc. Serum phosphatase was 1.98. Calcium was 8.1 mg. per 100 cc. and phosphorus was 4.98 mg. per 100 cc. Blood sugar (fasting) was 94 mg. per 100 cc., non-protein nitrogen—24 mg. per 100 cc. and creatinine—1.7 mg. per 100 cc. (Fig. 3).

It is interesting to note that up to this time there were no complaints of bone pains nor was there any bone tenderness. Only a short time before death did she begin to complain of severe and later, excruciating pain in the lower back, and exquisite tenderness over the sternum, ribs and the lower dorsal and lumbar spine could be elicited. X-ray pictures at this time revealed a pathological fracture due to the destruction of the fifth rib on the right, as well as further dissemination of foci of diminished density through the skull, pelvis and upper portions of the femurs and in the other ribs.

As soon as the diagnosis had been established, she was given six roentgen treatments of 150 R. each every other day to the enlarged cervical glands. The mass practically melted away in a very few days. As a result of this roentgen therapy, there developed a complete alopecia but there was a partial return of hairgrowth shortly before her death.

Additional therapy included a transfusion of 500 cc. of citrated blood. A diet rich in vitamins was supplied. Iron and liver were also administered.

Following a rapidly progressive downhill course, she died in January, 1939.

COMMENT

The interesting features of this case are (1) the vagueness of symptomatology, (2) anemia, (3) cervical lymphadenopathy, (4) absence of Bence-Jones protein, (5) alteration in the serum protein, (6) bone changes.

1. **Vagueness of symptomatology**—It is interesting to note that up until shortly before this patient died there were no clinical symptoms to suggest the diagnosis of multiple myeloma, as e.g.—the occurrence of bone pains or pathological fracture. It is impossible to state how long the disease had been present in this patient prior to the involvement of the lymph glands of the neck but it is not unreasonable to suspect that the condition may have been present for a long time—may have thus been responsible for the anemia and weakness which we know had been present for over four years.

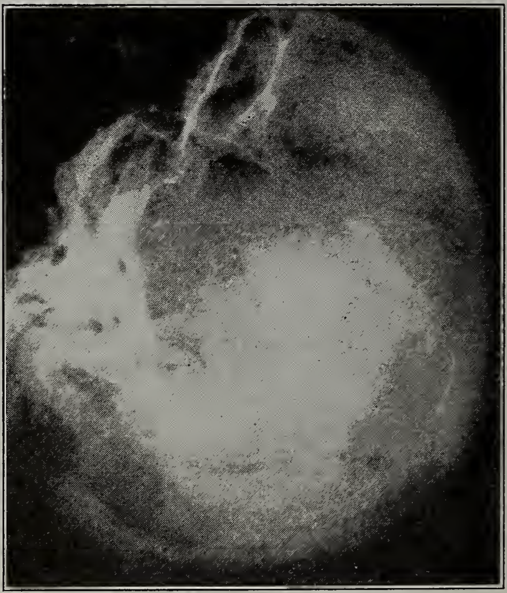

Figure 2. Note punched out areas.

2. **Anemia**—Throughout the entire course of this patient's known history anemia was present with accompanying weakness and exhaustion. In 1934, there was a normocytic, orthochromic anemia which was thought to be due to menorrhagia but was unrelieved by a hys-

terectomy. During an acute upper respiratory infection complicated by a sinusitis the anemia was again noted but still was unexplained. About six weeks later at the time of the onset of the adenopathy, anemia and fever were both present. Thus it was ultimately thought that multiple myeloma may well have accounted for the anemia and weakness which dated back several years.

3. **Lymphadenopathy**—A large mass of glands in the neck accompanied by fever and anemia suggested Hodgkin's disease as the most likely explanation. Since the disease multiple myeloma originates in the reticulum cell (plasma type) one can expect involvement of the bone marrow, liver, spleen and of the lymphatic system. According to statistics there is lymph node involvement in 60 per cent of cases. This case presents the first of four cases of multiple myeloma seen by one of us (S.S.B.) in which there was any glandular involvement. A few small glands were present elsewhere but the mediastinal glands did not appear to be involved. The involvement of the glands of the neck thus appeared as the first discernible sign of the disease in this patient, besides the unexplained hypochromic anemia of several years duration.

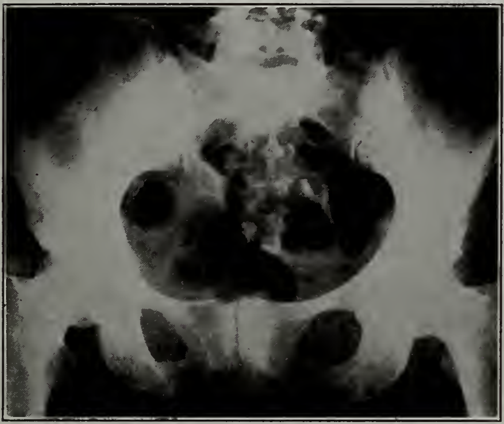

Figure 3. Punched out areas, pelvis.

4. **Bence-Jones Protein**—The absence of Bence-Jones protein throughout the course of the disease in this patient is noteworthy. This protein may be present intermittently—hence daily examination over a long period may be necessary to demonstrate its presence. Carcinoma, leukemia and other invasive diseases affecting the bone marrow may also produce Bence-Jones protein.

5. **Serum Protein**—The protein level in this case reached a maximum of 12.2 mg. per 100 cc. Instances of 15-16 mg. per 100 cc. have been recorded in certain cases. The rise is due chiefly to the increase in the globulin fraction which is manufactured in the bone marrow. The albumin fraction of course is manufactured in the liver. The elevated globulin is responsible for the rapid sedimentation rate of 150 mm. in one hour.

6. **Bone Changes**—The bone changes occur chiefly in the flat bones, viz., the skull, ribs, pelvis and vertebrae which contain red marrow—not in bones which contain fat only, such as the tibia. In the former, punched-out areas characteristic of the disease are formed, which result from infiltration with myeloma cells which are invasive like tumor cells. This overgrowth of plasma reticulum interferes with hematopoiesis and hence results in the production of anemia. The bone changes are not due to demineralization so that the calcium and phosphorus blood levels are found to be normal. The roentgen appearance of the bones in those instances in which the characteristic punched-out areas are not yet present are suggestive of hyperparathyroidism. This condition appeared in one of our cases but was soon ruled out when the blood calcium and phosphorus levels were found to be normal and the findings in the bone marrow established the presence of multiple myeloma. The infiltration may be so extensive that spontaneous fractures frequently occur. In one of our cases the characteristic crackling of a fractured bone appeared and was the first objective sign which suggested multiple myeloma. The disease was advanced. Most cases, however, terminate before the appearance of fractures. On the other hand in the early stages of the disease when it is still confined to the reticulum, no bony changes will be revealed by X-ray.

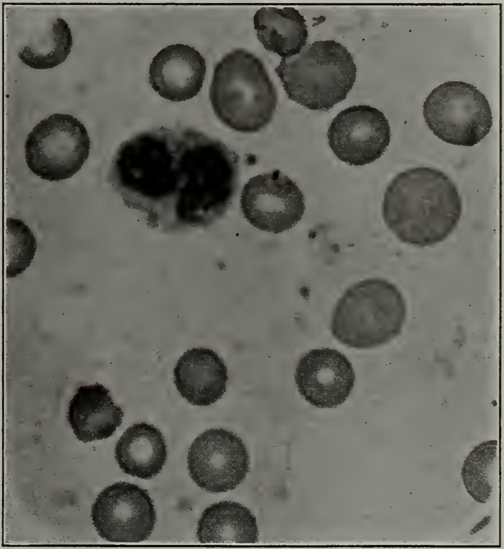

Figure 4. Typical plasma cells in bone marrow.

In one instance of multiple myeloma an injection of carmine was given intravenously. Examination of the bone marrow after two and twelve hour intervals revealed the presence of carmine granules in the plasma cells.

DIAGNOSIS

The diagnosis of multiple myeloma is not very likely to be made clinically early. The presence of a severe anemia especially when examination of the peripheral blood is inconclusive, indicates the need for a bone marrow examination. A diagnosis can be established in 100 per cent of the cases. The confirmatory evidence is established by the X-ray findings, the presence of hyperproteinemia with reversal of the albumen-globulin ratio, normal calcium and phosphorus blood determinations and a markedly increased sedimentation rate. The known duration of the disease in this case was two years; in a previous case it was four years. If the actual onset of the disease could be accurately established, the actual duration would undoubtedly be much longer. Bone pains were not present in any of these cases even in the presence of pathological X-ray findings. Thus we see that bone pains are present usually as a late symptom and are especially apt to be agonizing in the presence of pathological fractures. In one instance the slightest jar of the bed was sufficient to induce agonizing pains. When fractures are present of course, bone crackles which can be palpated, lead one to suspect a correct diagnosis. At present we know of no early clinical manifestation from which the presence of the disease can be detected.

Sternal puncture will reveal the characteristic plasma cells and establish the diagnosis in every instance. No real difficulty should be encountered in differentiating it from plasma cell leukemia.

TREATMENT

In this case we noted a remarkable response from treatment of the enlarged cervical lymph nodes with X-ray. They practically melted away in the course of a few days and there was no recurrence during the subsequent course of her life. In another case, radiation over the bones and spleen failed to affect either the bone pains or the blood picture. Treatment was given particularly intensively over the spine because of severe pains there but failed to alter their severity.

Liver and iron were used intensively but without any appreciable effect. Transfusion seems to yield the best immediate results but its results are transient. Up to the present time, our armamentarium is limited to the use of a high caloric, high protein and high vitamin content diet, liver and iron and the use of transfusions when the red count falls to about two million cells per cubic m.m. Transfusions may be repeated as often as needed. X-ray used judiciously may prolong life.

CONCLUSION

First, there are at present no clinical manifestations which are peculiar to multiple myeloma. Therefore early recognition of the disease is not very likely. Unaccountable anemia demands a sternal puncture and only thus will the disease be recognized before the late manifestations appear.

The disease originates in the plasma cell reticulum and assumes the characteristics of an invasive and malignant process which eventually leads to death. The progression may be very slow and extend over a period of years. If it could be recognized early intensive X-ray may be curative. Therapy up to the present was palliative. X-ray, transfusions and supportive measures—these can prolong life.

1100 Keith Building.

Fetal Heart Arrhythmias Due to Anoxia

The literature is replete with methods and devices to treat asphyxia of the newborn. The value of this therapy cannot be disregarded or minimized and yet in many cases the opportune time for therapy has passed and irreparable damage to the central nervous system is the unfortunate result. Variations of the fetal heart rate have long been ascribed to asphyxia and the recommended therapy has been immediate delivery. The early recognition of impending fetal asphyxia can be determined by continuous or at least very frequent ausculation of the fetal heart sounds. Institution of specific therapy, oxygen, at this time will in many cases either partially or completely restore the fetal heart rate to normal and successfully combat the anoxia. The response to oxygen therapy should be noted within ten minutes and frequently is apparent in less than five minutes. If after fifteen minutes of therapy no improvement is noted, it may be assumed that oxygen will be of no value. The time of preparation of a patient for operative delivery is usually more than ten minutes and this can be carried out while the oxygen is being given; thus no hazard is created for the infant. Frequently the improvement in the fetal heart rate will obviate the necessity of exigent operative delivery and its danger to mother and infant.—Curtis J. Lund, M.D., Madison, Wisc.; Am. Jour. Obs. and Gyn., Vol. 40, No. 6, December, 1940.

The tonsils undoubtedly are responsible for many upper respiratory infections especially in children subject to tonsilitis and to cervical adenitis and can be considered as playing an important role in these infections. Tonsillectomy is desirable in such children.—Albert D. Kaiser, M.D., Rochester, N.Y.; Minn. Med., Vol. 24, No. 11, November, 1941.

Jaundice Complicating a Case of Twin Pregnancy

J. L. BUBIS, M.D., F.A.C.S. and JOSEPH I. GOODMAN, M.D.

THE development of icterus in late pregnancy is apparently a rare occurrence as very few reports have been made on this subject. Lyon[1] studied 20 cases of abnormal pregnancy for the purpose of determining hepatic function. He employed the bilirubin elimination method wherein he injected specific amounts of bilirubin, which should normally be eliminated in a given length of time. In these cases he found an average retention of 11.8 per cent above the normal figures. He stated that the icteric index may be elevated in liver dysfunction but that in disturbances of some days duration, there is a tendency toward subsidence even though the faulty bilirubin elimination remains unchanged.

In 1938, Boyd and Connell[2] in connection with their work on fat metabolism reported the case of a tripara, aged 24, with what they termed "hepatic toxemia of pregnancy." This patient was eight months pregnant when admitted. She had been vomiting persistently for nearly a month and was slightly jaundiced. She complained of vague pains in the legs, areas of paresthesia in the hands, and exhibited exaggerated reflexes. The blood pressure was normal. The urine showed one plus albumen, acetone, diacetic acid, bile, and a few casts. The blood urea was elevated (46 to 66 mg. per 100 cc.), a low plasma albumen (2.7 mg.), an icteric index varying between 18 and 36, but normal dextrose, uric acid and CO_2 combining power. No values for plasma lipoids had been reported previously in this condition. The total lipoids were 413 mg. per 100 cc. This was less than half of the normal to be expected at this time. (There is a normal lipemia in pregnancy). The neutral fat was 68 mg. per 100 cc., the total fatty acids were 227 mg. per 100 cc. Total cholesterol was 123 mg. per 100 cc. Cholesterol ester was 63 mg. per 100 cc., free cholesterol 60 mg. per 100 cc. and phospholipid: 180 mg. per 100 cc. All these levels are subnormal for a pregnant woman near term except the phospholipid and free cholesterol values. This case is of interest as being the first recorded instance of a complete differential lipoid analysis of plasma in "hepatic toxemia of pregnancy."

In 1926, Thannhauser and Schaber[3] developed the observation of Feige in 1918 and found considerable decrease in the rate of the cholesterol ester to the total cholesterol of the blood in parenchymatous hepatic disease. They called it "Estersturtz" and considered it due to impairment of the liver in a postulated synthesis of cholesterol ester. The weight of evidence points to the fact that in uncomplicated parenchymatous disease of the liver there is a decrease in plasma ester cholesterol and a significant decrease in the ratio of the ester to the total cholesterol. In uncomplicated obstructive jaundice, on the other hand, hypercholesteremia is common.

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● Dr. Goodman. Cleveland, Ohio, is a graduate of Western Reserve University, School of Medicine, 1932; associate in charge outpatient department, Mt. Sinai Hospital; director, Cuyahoga County Nursing Home.

The case we wish to present, Mrs. J. E., aged 29, was first seen at the office of J. L. B., on August 12, 1939. She stated that she had conceived on March 17, 1939, which made the estimated date of confinement, December 25, 1939. Her past history revealed that she had had typhoid fever at the age of 10. Her menstrual history began at 16 with normal periods every 28 days and a seven day flow. There was no dysmenorrhea, leukorrhea, or excessive flow. In 1938, 22 months previously, she had a normal delivery, and one year previously, an induced abortion at two and one-half months. Throughout her .first pregnancy, she had nausea and vomiting. Her delivery and puerperium were uneventful.

When first seen during this pregnancy, she complained of pains in her arms and legs, had large varicose veins of the legs, and internal and external hemorrhoids. She had been taking caroid and bile tablets for her constipation. Her weight was then 146 pounds. The uterus was about four finger-breadths above the umbilicus and the fetal head was palpated in the pelvis. On October 14, 1939, her weight had increased to 153 pounds and the presenting part, which was suggestive of a breech, was floating at the brim of the pelvis. A breech presentation was diagnosed on November 11. Her weight was 158 pounds. On her last visit to the office on November 25, her abdomen was markedly distended, but her weight had dropped to 156 pounds. During this month she vomited on frequent occasions and complained of headache. Shortly afterward, she developed a nasopharyngitis which soon subsided on treatment of bed rest and a cough

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Submitted May 8, 1941.

From the obstetrical and medical services of Mt. Sinai Hospital, Cleveland, Ohio.

syrup. Her illness was afebrile. When seen several days later by J. G., there was a complaint of generalized aching and languor. She appeared apathetic. The temperature was normal and one could observe a moderate icteric tinge. There had been no clay colored stools nor dark colored urine nor had there been any history either before or during this pregnancy of colic, nausea, vomiting, gaseous eructations, heartburn or abnormal stools. With the exception of caroid and bile salts and the codein cough syrup, she had taken no medication. On December 8, about 16 days before the estimated time for delivery, she was referred to Mount Sinai Hospital.

On admission, the temperature was 99°F. (rectal), the blood pressure was 120/96, the pulse 85. The abdomen was markedly distended, tender and tense, and the presenting part was not engaged. The pelvic measurements were normal. Her stools were light yellow. Urinalysis revealed a positive test for bilirubin and urobilinogen, but was otherwise negative. Bile salts were absent. The white count was 13,200. The RBC was 4,430,000 and hemoglobin 78 per cent (Sahli). Blood chlorides were 588 mg. per 100 cc., icteric index 20.6, blood sugar 76 mg. per 100 cc., non-protein nitrogen 43 mg. per 100 cc., creatinine 1.8 mg. per 100 cc., Van den Bergh (quantitative) 1.0 units. Differential count: polymorphonuclear leucocytes 79 per cent, lymphocytes 18 per cent, myelocytes 3 per cent. Several nucleated erythrocytes were seen. The polymorphonuclear cells showed a shift to the left. Bleeding time was 2½ minutes. Clotting time was 8½ minutes. The reticulocyte count was 2.6 per cent, platelet count 323,250. Fragility test was within normal limits.

For the next two days and daily thereafter, she received a high carbohydrate and low protein, low fat diet with an additional 200 Gm. of carbohydrate intravenously in a 10 per cent glucose solution.

An X-ray of the abdomen revealed a full term twin pregnancy. One fetus was in a breech presentation and the other in a transverse presentation. There was no engagement of the presenting part. The following day she was drowsy and inasmuch as the icterus seemed more intense, it was decided that the uterus should be emptied as soon as possible. The question arose as to the method of procedure. Neither rupture of the membranes nor bag induction were considered feasible on account of the danger of a prolonged period of pain, dehydration, and possible infection. It was, therefore, decided that a cesarean section would be the quickest and most satisfactory method. This was done on December 10, 1939, under local anesthesia augmented by inhalation of nitrous oxide and oxygen.

The operation consisted of the usual vaginal preparation for a surgical case. The bladder was catheterized, the cervix was dilated enough to allow for good drainage and the presenting membranes were ruptured. This has been the procedure that J. L. B. has used for a number of years in order to flush out the cervical canal and the vagina as well as to decrease the amount of amniotic "spill" during the cesarean section. The patient was then placed in the dorsal position and the abdominal surface was prepared according to our routine technique. A low transverse Pfannenstiel incision was made, after blocking and infiltrating the areas with a solution of novocaine ½ per cent and adrenalin m. III to the ounce. The first child, a boy, weighing 5 pounds 10 ounces, was delivered. The amniotic fluid was drained free from the second bag by aspiration, the membranes were then ruptured and a 5 pound 1 ounce girl was delivered. The first was a breech and the second in a transverse presentation.

Because of the risk that any future pregnancies would entail and the fear that absorption of toxins from a large, boggy involuting uterus would put an added strain on the already diseased liver, a supracervical hysterectomy was then performed. The right ovary was markedly enlarged and contained numerous prominent follicular cysts. This and the accompanying tube were also removed. The usual technique for closing the uterine stump and the abdominal incision was followed. The time of operation was 65 minutes. Inhalation of a mixture of 10 per cent carbon dioxide and 90 per cent oxygen was then given for five minutes as a prophylactic measure to avert any possible pulmonary complications. A venoclysis was instituted for 24 hours through which 500 cc. of citrated blood, followed by 5 per cent glucose solution was given. Her general condition after the operation was fair. The next day she was drowsy and irrational at times. She vomited several times and her abdomen was distended though soft. She was given 200 Gm. of glucose intravenously in a 20 per cent solution during the next 24 hours.

On December 12 she was more icteric, but more alert and showed less irritation. The 20 per cent intravenous glucose solution (500 cc.) was repeated twice. The icterus became more severe and the icteric index reached a maximum of 60.1 on the second postoperative day, at which time the Van den Bergh was 10.5. During the next two days, the urine failed to reveal urobilinogen although bile pigment was present in increased amount. Cholesterol was 183.7 mg. per 100 cc., cholesterol ester 49.1 mg. per 100 cc. Blood sugar (fasting) was 75 mg. per 100 cc., non-protein nitrogen 32 mg. per 100 cc., creatinine 1.6 mg. per 100 cc. Total protein 7.4 mg. per 100 cc., albumen 6.8 mg. per 100 cc. and globulin 0.6 mg. per 100 cc. Bile pigment could not be obtained in the stool. The temperature had risen following the operation from 99°F. to 104°F. (rectal) on the 15th of December. The pulse rate was 140 and the respiration rate was 33 per minute. The white count varied between 24,450 and 30,050. The jaundice was less marked, but she complained of severe pains and swelling in the lower part of the abdomen, especially to the right. Hot stupes were applied and long hot douches three times a day were instituted. There was a profuse, foul, sanguino-purulent vaginal discharge the next day. Her temperature dropped to 101°F. and became normal in about one week. From this point, there was gradual improvement clinically. The patient became more alert and the jaundice less apparent. The improvement was corroborated by the laboratory findings, the icteric index having dropped to eight on the day of her discharge, December 30, 1939.

She was markedly improved physically and mentally. There was no tenderness or enlargement over the gallbladder or liver region, the jaundice disappeared and the urinalysis was normal. She still had a slight anemia: 71 per cent hemoglobin and 3,890,000 red cells per cu. mm. The cholesterol rose from 128.7 to 275 mg. per 100 cc. and the esters rose from 40 to 95 mg. per 100 cc., which was still low. The urine became negative for bilirubin. Urobilinogen was still present. At no time were leucine and tyrosine present. Stool examination revealed the presence of bile pigment. Blood sugar readings (fasting) were consistently below 100 mg. per 100 cc. The blood non-protein nitrogen, creatinine, urea nitrogen and uric acid were constantly normal. Blood calcium was 8.5 mg. per 100 cc. Prothrombin time was done on several occasions during the active stages and found to be increased.

Since her discharge from the hospital, she has been seen several times at the office. She had no complaints; her weight, red count and hemoglobin had returned to normal.

DISCUSSION

In this case, the icterus developed after several weeks of intermittent vomiting and headache, during the final days of pregnancy. Therefore, one must first consider a toxemia of pregnancy as the cause of the jaundice. This condition belongs to the toxic or infectious type of icterus in which damage to the liver results in an increase of bile pigment in the blood stream. So-called catarrhal or infectious jaundice falls into this group and had to be considered here in the differential diagnosis. Obstructive jaundice, in which mechanical obstruction prevents the outflow of bile after the bilirubin has already passed through the cells of the liver, had to be ruled out. Other possibilities were a common duct stone or pressure exerted on the common duct by an over-distended and tense uterus. The presence of bile pigment in the stool and the urobilinogen in the urine tend to rule out the obstructive type of jaundice.

We felt that, regardless of which one of the above mentioned factors may have been the etiological one in this case, we could positively assume that the liver cells were being subjected to damage. Hence, to prevent this damage from becoming too severe, obstetrical interference was indicated at the earliest moment.

This case presents an unusual disturbance in liver function and emphasizes the use of several physiologic methods in estimating the degree of liver damage and its eventual recovery.

The cholesterol metabolism of the liver was considered of especial importance in this connection. It has been pointed out that one of the chief functions of the liver in its relation to cholesterol concerns the esterification of cholesterol. Of the total cholesterol which exists in the blood stream 50 to 70 per cent is normally found in the form of a cholesterol ester. When the cholesterol ester drops below 50 per cent, the liver damage is indicated. The total cholesterol and cholesterol esters in the case under discussion taken on frequent occasions revealed this relationship to a marked degree. As the clinical course changed, the total cholesterol dropped as low as 128.7 mg. per 100 cc. and the cholesterol esters below 40 mg. per 100 cc. At the time of her discharge, the total cholesterol had risen to 275 mg. per 100 cc. and the cholesterol esters to 95 mg. per 100 cc. (still only 31 per cent).

Protein metabolism is closely associated with the liver. In a damaged liver one usually finds the total protein of the blood decreased and in some cases there are changes in the albumin-globulin ratio, so that the ratio of albumin to globulin may be changed from a 4:1 or a 3:1 to a 2:1, 1:1 or even a 1:2 ratio. In this case a single determination performed at the height of the liver damage showed an apparent elevation of total protein 7.4 mg. per 100 cc. However, there was a marked diminution in globulin to 0.6 mg. per 100 cc., a ratio of approximately 10:1. Because of insufficient data in this case one cannot make any comparison with other abnormal cases in which there is an alteration of protein metabolism in the presence of liver damage. Because the liver is intimately associated with bilirubin metabolism, estimations of the bilirubin content of the blood are very important.

Quantitative Van den Bergh tests were performed on several occasions. At the time of admission, there were 0.1 units which is considered normal. This rose to 12.6 units at the peak of the illness. This is a rather difficult laboratory procedure and more difficult to interpret than the icteric index. Upon admission, this latter test showed 20.6 units and at the peak rose to 60.1 units. Upon discharge, this dropped to eight units which is practically normal. We consider this test more reliable than the quantitative Van den Bergh test. It is a colorimetric estimation of the discoloration of blood serum against known standards of 1:15,000 potassium dichromate.

Other physiologic tests of liver function can be utilized but are not commonly performed. For instance, the glucose tolerance test indicates the reduced ability of a damaged liver to utilize glucose. Increased prothrombin time indicates damage to that function of the liver which is concerned with the production of prothrombin.

As opposed to these physiologic methods, there are many other means of estimating liver function. The bromsulphathalein test is probably the most commonly used but like other dye tests it is subject to error. Normal results with these tests can be produced by small amounts of normal isolated liver. Similar results may be obtained with the levulose tolerance and the glucose tolerance tests.

Thus, in conclusion, we find that in treating jaundice, a knowledge of liver function becomes helpful. The presence of an increased serum bilirubin as an indication of liver damage in toxic and infectious jaundice is important. It has been found that the glycogen content of the liver is a most important factor in maintaining the normal metabolism and in keeping the liver in physiologic balance. This necessitates that glucose and other carbohydrates which may be later metabolized into glycogen should form an important part of the therapy. Experiments have shown that damaged liver cells do not manufacture glycogen as promptly as normal cells and therefore require a higher than normal concentration of sugar in the blood at any given time. For these reasons, glucose should be administered intravenously in jaundiced patients so that large amounts of sugar can reach the liver and be utilized in the repair of the damaged cells. Hence, this patient was given between 300 Gm. and 400 Gm. of carbohydrate daily. At first, this could only be given intravenously in a 10 per cent or 20 per cent solution, and as the patient improved a larger proportion could be given by mouth. It is noteworthy that on this high carbohydrate, low fat and maintenance protein diet augmented by intravenous glucose, the icteric index showed a steady definite fall, indicating that the repair of liver cells was well under way. We utilized these estimations of the icteric index taken daily as an indication of the course of the disease. As described above, the other laboratory procedures also gave corroborative evidence of a return to almost normal liver function.

Iodides, calcium, saline cholagogues and bile salts have all been utilized in the treatment of these conditions. Each has its place but merely as adjuvants in the treatment. Their benefit is controversial.

In recent years, the vitamin content of the liver cells has become an important factor in liver disease. Many patients develop a low grade avitaminosis as a result of dietary deficiency. Vitamin B, particularly thiamin chloride, is important in liver disease and its administration in copious amounts in these cases produces improvement in the liver function. Utilization of glucose by the liver in large quantities has been shown to require large amounts of thiamin chloride. Quick's[4] studies on vitamin K have recently shown that a diminution in prothrombin on diets deficient in this vitamin produced a hemorrhagic tendency.

The performance of the cesarean section would tend to obviate any further damage to the liver, which undoubtedly would have followed a prolonged labor and dehydration. The supracervical hysterectomy was considered necessary (1) to prevent the absorption of additional toxins by the already diseased liver, and (2) to avert the danger of postpartum hemorrhage which frequently occurs in cases of over-distended uteri especially in the presence of jaundice.

In conclusion, we can state that the physiologic approach to this type of case from the point of view of diagnosis, clinical course and treatment is not only most helpful but essential for the most satisfactory results.

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Sterility in the Husband

One must consider this a problem of a barren union of a man and woman and must imply joint responsibility. It is ridiculous to attempt to treat a case without a thorough study of both husband and wife, individually and collectively. Sometimes a highly fertile partner may compensate for his or her relatively less fertile partner.

In the past decade there has been noted a definite and encouraging change in attitude on the part of the husband as to the important role he plays in the barren marriage. It may be best to make the study of the husband before that of the wife because of its simplicity and inexpensiveness.

Specimens of semen are obtained in a sterile, large open-mouthed jar either through masturbation or ejaculation assisted by coitus. The analysis is repeated to arrive at valid conclusions. The assay must be primarily based upon the morphological studies of the sperm heads, midpieces and tails. Fertility is impaired if the percentage of abnormal forms is over 20 per cent. The count is of relative importance, as fertile specimens have been found when the counts have been as low as 2,500,000 per cm. Viability and motility are also important. Men whose semen shows signs of lowered fertility should be warned that, although conception may occur even without treatment, pregnancy is liable to end in miscarriage unless appropriate steps are taken.

If the male is found to be highly fertile, he is temporarily shelved until the wife has been studied.

If he proves to be relatively sterile, he is referred to an internist and genito-urologist for treatment. Before any specialized treatment is started, one must improve the general health of the husband. Eradication of focal infection; proper diet, including adequate mineral and vitamin therapy; mental, sexual and physical hygiene—all these must be outlined to the patient and their importance stressed. If the patient is anemic, iron therapy is essential. Good results have been obtained from thyroid medication in instances of hypothyroidism. Promising results are sometimes obtained by additional glandular therapy of combined pituitary and chorironic gonadotropins. Massages of the prostate and seminal vesicles three times a week regardless of whether or not pus cells are present is routinely done with occasionally surprisingly good result.

If no improvement of the semen is noted after four to six weeks of the chosen treatment, the problem should be dropped. Treatment should continue for an additional six or eight months if necessary, if improvement is noted.—Lee J. Glober, M.D., San Antonio; Tex. S. Jour. of Med., Vol. XXXVII, No. 7, November, 1941.

A Classification of Asthma

JOHN H. MITCHELL, M.D. AND WM. F. MITCHELL, M.D.

THE majority of individuals who manifest the typical wheezing dyspnea that we call asthma are allergic. They can be proved by clinical history, skin tests and clinical trial to be sensitive to some substance which is ordinarily harmless to others. However, when one attempts to apply the rules of allergy to every case of asthma one not infrequently finds considerable inconsistencies. Skin tests may be entirely negative, there may be no eosinophiles in the secretions, the clinical history may give no clues concerning a specific etiological agent, adrenalin may not produce the expected or desired relief, the results of therapy may be poor and one may be inclined to doubt the validity of the rules of allergy. However, when, after satisfactory experience with a considerable number of asthmatics, one is able to classify and segregate those which are truly allergic, it will be seen that a remarkably high percentage do follow the rules and, if adequately diagnosed and satisfactorily managed, will repay all these efforts with prompt and satisfactory relief.

By using the classification described below we have been able to predict, with a reasonable degree of certainty, the results to be expected. One can readily see why failures occur in the non-allergic group, when only allergic methods of diagnosis and treatment are employed, and why the results are so uniformly excellent in those asthmatics where hypersensitiveness to a specific etiological agent can be demonstrated. The following discussion is necessarily a brief summary calling attention to the most outstanding characteristics of each type. No attempt is made to include all the possible conditions which might produce the asthma syndrome. Only those which are most commonly seen will be discussed.

EXTRINSIC ASTHMA

This type follows all the rules of allergy and is characterized by recurring attacks of varying duration and severity and with long or short intervals of complete freedom. A careful history by one familiar with the disease usually elicits strong evidence that some air-borne substance is the causative factor. Pollen, mold spores, household and occupational dusts and animal emanations are the most common. Foods are less common causes. The onset of the disease can usually be traced to early life; the majority of cases beginning between the ages of 2 and 20.

Eczema has often been present in infancy; one or several near relatives have suffered from asthma, hay fever or eczema, eosinophiles are found in the peripheral blood and in the sputum, and the skin tests are usually positive by the scratch or puncture method. Prompt relief is obtained by adrenalin 0.3 cc. but it may have to be repeated frequently to control the symptoms. Nausea and vomiting is the rule after an injection of morphine. Aminophyllin 4½ gr. intravenously controls the paroxysm, but is rarely needed. Avoiding the offending allergen will result in complete freedom.

Adequate "desensitization" will control better than 80 per cent of these cases when avoidance is not possible. An exception is the so-called "Summer asthma" which has a typical seasonal history, often beginning in April or May and lasting until October or November with June and July being the worst months. The etiology is unknown and skin tests with all known pollens and mold spores are negative. It is hoped that the offending mold spore will soon be found and then satisfactory treatment will be available. At present the obtainable results are very poor. In all instances complete relief can be obtained in an allergen free room.

ASTHMA DUE TO RECURRING BRONCHIAL INFECTIONS

The attack is preceded by rhinitis and the discharges from the nose and bronchi are purulent, running the typical course of acute nasal or bronchial infection. The first attack may occur any time in life, usually in childhood. There is no associated personal or family history of other allergy, skin tests with common antigens are negative and there is no eosinophilia. The clinical response to adrenalin is slow and uncertain and the desired results can be obtained by the cautious use of small doses of opiates. Treatment consists in repeated and gradually increasing

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Submitted August 1, 1941.

injections of autogenous or stock vaccines throughout the year, never using large doses and repeating about 0.3 cc. at two-week intervals. The results are generally very satisfactory.*

"INTRINSIC" ASTHMA

This type of asthma usually begins between the ages of 20 and 40, is perennial in character and often presents continuous asthmatic breathing for periods of months or years. There may be periods of comparative ease, but there is always a wheeze in the chest. Nasal polypi are more often present than not and it is in this group that we find the majority of all those asthmatics who are aspirin-sensitive. Infection may be observed in the nose or bronchi but it is secondary and superimposed upon the edematous mucosa and cannot be considered as a cause. In fact, these individuals say they feel better after they have had a respiratory infection with purulent sputum.

When there is no superimposed infection one finds eosinophiles in the sputum and there is often a very high eosinophilia in the peripheral blood (15 to 30 per cent). The etiology is unknown, skin tests are uniformly negative and yet aspirin often produces very violent and occasionally fatal attacks. Relief from adrenalin is prompt but fleeting and so these individuals administer adrenalin to themselves every few hours. Often they work up to a dose of 1 cc. or more. The asthma which follows the ingestion of aspirin is so severe adrenalin is usually ineffectual. The slow intravenous injection of aminophyllin is followed by a few hours of relief while morphine more often produces nausea and vomiting. Since the etiology is unknown, treatment is non-specific and a great many substances have been employed. Occasionally one may be found helpful but usually the apparent benefit is quite temporary. The results by any method whatever are uniformly poor in this group of asthmatics. They go from physician to physician, from climate to climate hoping to find relief. Fortunately they make up but a small percentage of the total number of asthmatics.

CARDIAC ASTHMA

The onset is usually between 40 and 70 years of age and occurs most often in allergic individuals who have had hay fever or asthma younger in life. Attacks of asthma may have been absent for 10 or 15 years and then begin to recur again after moderate exertion or the patient may be awakened from his sleep with a paroxysm. Clinically he has typical bronchial asthma and the milder attacks are promptly relieved by small doses of adrenalin. He may have an occasional eosinophile in his sputum and 3 or 4 per cent in the peripheral blood. His personal and family history manifests allergic disease and skin tests are frequently positive. However, one must realize that these tests usually indicate past sensitivity or play only a minor part in the present asthma.

Ordinarily the first sign of heart disease is dyspnea on exertion. In individuals with a past history of asthma the earliest sign of heart failure is a recurrence of the typical asthma syndrome after mild exertion or during sleep. Often one finds hypertension of a moderate degree (180/100 or thereabouts) and there is moderate enlargement of the heart indicating in most instances that the blood pressure had been higher. The patient often knows that he has had a systolic pressure of 200 or so for several years. Somewhat less frequently coronary sclerosis, with or without electrocardiographic evidence of myocardial damage, is encountered. Postmortem not rarely has revealed recent or previous cardiac infarction when the patient died in status asthmaticus. Occasionally a small dose of adrenalin in this coronary group will produce angina. We have seen no unpleasant results from its use in the hypertensive group but of course, sooner or later, as failure progresses, it becomes ineffectual.

If failure is due to coronary sclerosis or thrombosis the use of adrenalin is definitely contraindicated. Fortunately aminophyllin 4½ gr. given slowly intravenously affords most satisfactory relief in this circumstance. Treatment consists of absolute rest, full digitalization, the limiting of fluid intake and aminophyllin or morphine to control the asthmatic paroxysms. Allergens to which the patient has been found sensitive should also be strictly avoided. In most instances the immediate result of this management is very good but, of course, ultimately they die cardiac deaths.

"ASTHMA" DUE TO ANATOMICAL CHANGES IN THE BRONCHIAL TREE OR PULMONARY ALVEOLI

a. Fixed pulmonary emphysema is usually primary but may be secondary to severe bronchial asthma. It is characterized by dyspnea on exertion, low vital capacity, low, fixed diaphragms and is often complicated by superimposed chronic bronchial infection and bronchial dilatation of a moderate degree. Wheezing dyspnea may be extreme during acute bronchitis. Treatment is directed towards the bronchial infection. Fixed emphysema can rarely be materially benefited by any sort of treatment or management.

b. Foreign body, tumor or inflammatory edema at or near the larynx or in the large bronchi may produce wheezing which simulates asthma. As a rule, however, the dyspnea is croupy or crowing and is most marked during the inspiratory phase. Cases of laryngeal diphtheria and syphilitic edema of the larynx have been erroneously considered asthma because of the temporary improvement in breathing which followed the administration of adrenalin.

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* NOTE: The above is a description of a pure case of so-called "bacterial asthma". Very frequently extrinsic asthmatics experience attacks following bronchial infection and one must appreciate that these mixed forms occur frequently. In fact, mixed cases are far more common than pure "bacterial" asthma.

SIGHING DYSPNEA

An uncommon syndrome of psychic origin occurring usually in women and characterized by the sudden onset of constant, deep sighing. There may be from 6 to 20 sighs a minute. All the extrinsic and intrinsic muscles of respiration are put into use for these forceful inspirations. On auscultation no rales or wheezes are heard and the breath sounds are quite normal. Under the fluoroscope the lungs are normal and the diaphragms move up and down as one would expect with any deep inspiration. During sleep the sighing disappears and breathing is normal. Afflicted individuals usually have the stigmata of the neurotic or hysterical and treatment must be directed along these lines.

SUMMARY

1. A classification of asthma is presented which has been a valuable aid in the diagnosis and in the management of asthmatics.
2. Extrinsic asthma follows the rules of allergy and carries an excellent prognosis.
3. Asthma resulting from recurring bronchial infections is frequently associated with extrinsic asthma.
4. The typical asthma syndrome often is the first sign of a failing heart in those who had asthma younger in life.
5. Intrinsic asthmatics usually present a continuous wheeze; frequently have nasal polyps; are often aspirin sensitive and generally respond poorly to treatment.
6. The wheezy dyspnea of fixed pulmonary emphysema with superimposed bronchitis, should not be confused with true asthma.

Tuberculosis Is a Vanishing Disease

When this century began we know that tuberculosis claimed more than 200 victims annually from every 100,000 of our population; today, four short decades later, tuberculosis has been driven from top billing down to a shaky seventh. But these facts do not tell all of the story. Tuberculosis is still the leading cause of death in those of college age. Tuberculosis is still as much of personal catastrophe for the individual who contracts it today as it ever was in the past. Tuberculosis has lost none of its ability to ruin a career, wreck family budgets, burden taxpayers, or bring suffering and disability to thousands of Americans, no one of whom deserves or needs to contract tuberculosis if every one utilized fully what medical science knows and has to offer.—Charles E. Lyght, M.D.

Chronic Brucellosis

I believe there is no question that sulfonamide drug medication is the treatment of choice in the acute case. Poor results from vaccine or serum treatment in the acute cases prior to the advent of chemotherapy was pretty much the rule. Chemotherapy has no place in the treatment of chronic brucellosis. It has been my experience, and that of others, that it makes them worse. Vaccine treatment has to be relied on in the chronic cases.

I have almost exclusively used a brucella antigen prepared by Huddleston of Michigan State, called brucellin. Originally he, as well as others, advised a few rather large doses of this filtrate, sufficient to produce a brisk febrile reaction. In this way he felt the average case could be cured in two or three weeks. I have not used this principle except in cases which have a negative or mildly positive brucellergin reaction. I have found it preferable to follow a beginning minute dosage desensitizing principle. It has been my experience, that if I give enough antigen to produce more than a slight local erythema reaction at any time, it makes them worse.

Desensitization has to be carried out in the beginning much the same as with a pollen allergy; then, as larger doses of the antigen can be given, a proper immunity can be established with a subsidence of symptoms. This principle of treatment is now being observed by most commentators on this subject. Unfortunately, it is a long drawn out procedure often requiring months. Harris has advanced some ideas regarding intravenous combined with subcutaneous injections, which I plan to follow in the future in stubborn cases. It seemed advisable, when using the stock vaccines, to use the abortus instead of the melitensis strain, in that the latter may produce violent reactions, and at the same time fail to build up adequate opsonins.

Treatment is a sad substitute for prevention of this malady. Of course, it can be eliminated, if self-evident appropriate measures are carried out. No raw milk or dairy products should be consumed. As pointed out in the human, dairy stock may also have a negative agglutination reaction and still have brucellosis; such a cow may continue to discharge Brucella in the milk. Therefore, no matter how well certified raw milk is, its consumption may be disastrous. The Bang's disease control program now in progress should have the unqualified support of the medical profession.—Clark C. Goss, M.D., Seattle, Wash.; Northwest Med., Vol. 41, No. 11, November, 1941.

Relief of Prostatic Obstruction

A Short Review of 132 Consecutive Cases

EUGENE A. OCKULY, M.D., F.A.C.S.

DURING the past 10 years great changes have occurred in the surgical methods employed in the relief of prostatic obstruction. These changes, although seemingly recent, had long been pioneered by men on the European continent and in later years in America by Young and Caulk in their so-called prostatic punch operation. With the development of radio engineering advantage was taken of the newly found electrical facts and applied to perfecting the present resectoscope.

In 1932 at the meeting of the American Medical Association, Davis presented his first series of cases on transurethral resections of the prostate. As Beer's contribution of cystoscopic fulguration greatly advanced the treatment of bladder tumors, so transurethral prostatic resection has marked a tremendous advance in the treatment of prostatic obstruction.

Urology has always been marked and rightly so, by the trend away from open surgery in favor of so-called closed surgery and away from radical to conservative open surgery. This is only natural because many urological lesions and especially prostatic obstructions occur in age groups that are notably poor surgical risks. Open surgery frequently results in long morbidity and invalidism, and certainly this is to be avoided whenever possible in poor surgical risks and especially in the aged.

To be satisfactory, a surgical procedure must include not only a relief of the complaint by surgical methods that involve the least possible morbidity and lowest possible mortality, but also a functional result, local and systemic that returns the patient to society in a state of physical equality with his age group.

The relative high morbidity and mortality in open prostatic surgery frequently denied patients relief, either because the surgical risk was too great or they themselves refused because of fear of the procedure. Transurethral prostatic resection, however, when carefully and properly executed more closely approaches the definition of a satisfactory surgical procedure and consequently affords many patients an opportunity to obtain relief which previously had been denied them.

I would like to illustrate this statement with a short review of 132 consecutive prostatic resections in which there were no deaths. All patients coming to me for surgical relief of prostatic obstruction have been treated by transurethral resection and none were refused because of age or physical infirmities.

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AGE

The age of these patients varied from 36 to 86 years; 1.5 per cent were between 30-40, 1.5 per cent between 40-50, 4.6 per cent between 50-60, 5.3 per cent between 60-70, 32.3 per cent between 70-80, and 4.6 per cent between 80-90 years. In this series therefore, 92.2 per cent of the resections were in men between 60-90 years of age.

RESIDUAL URINE

These patients had been suffering from moderate to severe symptoms of prostatic obstruction from six months to 20 years; all carried residual urine in their bladders or presented themselves in a state of acute complete retention of urine; 70.4 per cent were in complete retention and required catheterization when first seen; 20 per cent complained of severe symptoms and carried a residual urine of more than 150 cc. while in 9.6 per cent the residual was less than 150 cc. In the latter group the symptoms were such that the patient demanded relief or the associated bladder infection could not be controlled until the obstruction was relieved.

PREPARATION

The preparation of a patient for prostatic resection is just as important as when a suprapubic prostatectomy is contemplated. Blood counts, blood chemistries, various kidney function tests, control of infection, knowledge of the type of bacteria invading the urinary tract, exact knowledge of the status of the kidneys, ureters and bladder, recognition of pathology in and care of the cardio-vascular apparatus, water balance and vitamin deficiencies require niceties of judgment and care in order to bring the patient into the optimum state for resection.

It is unfortunate that many physicians and their patients are of the opinion that prostatic

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Submitted August 27, 1941.

resection is a simple and minor procedure involving the removal of a few fragments of prostatic tissue which can be done without preparation. The contrary is true. Prostatic resection demands a high degree of dexterity and skill in the manipulation of urethroscopic and cystoscopic instruments as well as the ability to recognize the urethral and bladder neck anatomy through the resectoscope. The pathological anatomy that is encountered cannot be understood by looking at the pathology in toto but must be comprehended through a series of small visual fields which the operator reconstructs in his mind to form a complete entity. The field of safe operation is definitely limited. Over-reaching on the bladder side or in depth will result in extravasation of urine; and on the urethral side, in incontinence. Two of these are frequently fatal unless immediate and adequate steps are taken and the third is, to say the least, very troublesome. The frequency of complications is in direct ratio to the ability and judgment of the operator.

HOSPITALIZATION

The hospital stay in the series of cases was 13.9 days. This represents the time consumed in preparing the patient for resection as well as the postoperative hospitalization. Fourteen per cent of these patients were prepared by suprapubic drainage and the remainder by indwelling urethral catheter when necessary. The 14 per cent that had suprapubic cystotomies preliminary to resection, of course increased the average days of hospitalization for the entire group. Cystotomies were done on the following:

1. Those with severe kidney damage where we felt urethral catheter drainage would be too prolonged or hazardous.

2. Those who could not tolerate a urethral catheter but who required long drainage because of bladder infection.

3. Those in whom we could not control the urinary infection by urethral catheter drainage.

4. Those in whom we encountered large bladder calculi that required suprapubic removal.

ANESTHESIA

In all but five cases a sacral block was used as the anesthetic. This will be adequate in a high percentage of cases and it lessens the risk associated with anesthesia. Patients thus anesthetized have no sensory or muscular interference of their extremities and can assume when necessary, a semi-sitting position during the resection and upon returning to bed. In patients with cardiac conditions, this is frequently of great importance. The systemic reaction of a sacral block as compared with a spinal or general anesthesia is greatly lessened. Patients can usually take fluids and food upon returning from surgery thereby minimizing interference with their routine. This allays apprehension and vitalizes convalescence.

MULTIPLE RESECTIONS

To achieve a satisfactory result more than one resection was necessary in 12.4 per cent of this series. The time intervening between resections was about one week. In two cases a third resection was necessary.

PROSTATIC CARCINOMAS

In this series the incidence of carcinoma of the prostate was 17.7 per cent. In a case of known carcinoma of the prostate a resection frequently relieves patients from the need of permanent suprapubic tube. However there are a certain number in whom the carcinoma will produce obstruction again; then a second resection is done if possible; if impossible, then a suprapubic cystotomy is necessary.

POSTOPERATIVE COMPLICATIONS

Postoperative complications of a serious nature have been singularly absent in this series. One patient developed a perivesiculitis which was relieved by surgical drainage. Immediate postoperative hemorrhage was limited to a few small clots which suction removed easily via the indwelling catheter. The incidence of postoperative bleeding can be reduced greatly by careful control of all bleeding points during the operation and by close observation after the operation to assure adequate drainage through a closed irrigating apparatus. Needless to say this presupposes good nursing care.

Postoperative fever of 100 to 103 degrees occurred in 28 per cent of the cases, usually subsiding within 24 to 48 hours. Severe pyelitis was encountered in only two cases. In each of these there was an associated bilateral hydronephrosis and hydro-ureters with uretero-vesicle reflux.

Late or secondary hemorrhage, severe enough to require intervention occurred in two cases; in one case two weeks and in the other two months after discharge from the hospital. The clots were pumped from the bladder with the bladder evacuator and the bleeding point closed by fulguration through the resectoscope. Late secondary bleeding although troublesome is usually not of serious consequence and with evacuation of the blood clots from the bladder the bleeding point usually closes immediately of its own accord. Where it does not, fulguration through the resectoscope can readily be done.

POSTOPERATIVE RESIDUAL URINE

The postoperative residual urine, ascertained upon repeated visits to the office after discharge from the hospital, showed that 68 per cent had no residual; 23.7 per cent carried from 1 cc. to one ounce; 6 per cent from one to two ounces and

2.3 per cent more than two ounces. The highest residual urine of 400 cc. was encountered in a man who had a very much thickened interureteric ligament which was not resected at the time of the removal of the prostatic obstruction. However, this man feels so much better that up to the present time he has refused to have any more done. He is free from symptoms although his urine is highly infected.

From a few to a moderate amount of white blood cells usually persist in the urine for a considerable period of time. This situation is tolerated without difficulty and eventually the urine becomes free of cells if all residual urine is eliminated and there are no concomitant reasons, such as bladder diverticula, hydronephrosis, renal or bladder calculi present.

SUMMARY

This short review does not cover all phases of the subject; but it does attempt to present in a semi-analytical way some of the more salient points in the relief of prostatic obstruction.

As time progresses there will be a different psychology regarding this disease. Convictions established and fears abated the family physician will suggest that his patients seek relief before long-standing obstruction and infection does irreparable damage to the kidneys and other organs. They will present themselves in comparatively good condition and secure for themselves a relative increase in their life-span.

316 Michigan St.

Allergic Reactions in Treatment of Varicose Veins

Allergy to sclerosing or thrombosing solutions in the treatment of varicose veins is unfortunately not too uncommonly experienced. In 11 years, using sodium morrhuate for the most part, Saul Rosenzweig, M.D., Meyer Ascher, M.D., and Louis Zlatkin, M.D., of Detroit, Michigan, treated 938 cases, who received a total of 10,510 injections. Sixteen true allergic reactions were encountered, an incidence of 1.7 per cent of all cases treated. In practically all of these cases (14 out of 16) the allergy was an acquired one. Five types of allergic reaction, either alone or in combination were noted: (1) cutaneous; (2) respiratory; (3) cerebral; (4) gastro-intestinal and (5) anaphylactic shock. The allergy was specific to the injected material and was not experienced when a shift from sodium morrhuate to sodium ricinoleate, or other sclerosing solutions were made. Only one case of severe anaphylactic shock appeared; two others suffered syncope; no patient died. Fifteen of the sixteen reactors were female, which is not the ratio of females to males suffering from varicose veins; the ratio of females to males in this series as reported is 2.41 to 1.

Skin tests for suspected drug allergy are of little or no assistance in the prevention of reactions, only two persons of the 16 exhibiting reactions gave helpful skin tests. The treatment of the mild reactions is purely symptomatic; small doses of epinephrine shorten the episode as well as relieve the symptoms; ephedrine by mouth can be helpful. The severe reactions are acute medical emergencies; here again epinephrine is the most valuable agent, and should rapidly be used in full therapeutic doses; ephedrine and similar drugs should be employed here. No other chemicals are of any significant assistance. Supportive measures should of course be employed; external heat and intravenous glucose seem to be of distinct help. No attempt at desensitization was made.—Jour. Mich. S.M.S., Oct., 1941.

Serological Tests for Syphilis

The presence of syphilis is practically excluded by a negative report to a sensitive "screen" test (e. g., Kline exclusion or Kahn presumptive). Doubtful or positive reactions are so insignificant that they need not be reported to clinicians. If the result of an exclusion test is doubtful or positive, the specimen is then tested by a complement fixation (Kolmer) and a standard flocculation test (Kline or Kahn); negative results on these tests afford practically conclusive evidence that the positive reaction to the exclusion test was an error.

Negative reports to standard tests exclude the probability of syphilis except in the following circumstances. (1) The reaction may not become positive in the first week or two that the chancre is present. (2) Following the treatment of syphilis a change to serologic negativity usually precedes cure. (3) With modern serologic technics one rarely finds clinically active untreated syphilis associated with negative serologic tests, but in the absence of clinical symptoms an undeteremined number of persons spontaneously achieve serologic negativity. (4) In an apparently normal child born of a syphilitic mother the reaction may be negative on cord blood or in the first few weeks of life and still the child may later develop certain evidence of congenital syphilis.

In the presence of clinical evidence one can accept a single positive report as diagnostic of syphilis. In the absenece of other signs a diagnosis of syphilis should never be based on reports on a single specimen because non-syphilitic conditions can cause transitory positive reactions. Repeated strongly positive (4+) reactions are rarely reported in the absence of syphilis; leprosy, yaws, and possibly a few other diseases are exceptions. False strongly positive reactions are occasionally reported on the cord blood or in the first few weeks of life of a normal child born of a syphilitic mother.—Francis W. Lynch, M.D., St. Paul; Minn. Med., Vol. 24, No. 10, October, 1941.

X-Rays in the Treatment of Acne Vulgaris

H. G. MISKJIAN, M.D.

THE day when we shall know the systemic cause of acne, we shall cure our patients with the same regularity and assurance as we cure pellagra today. Until that day dawns, local treatment must, of necessity, remain our principal method of attack.

Of the various methods of local treatment at our disposal, X-ray therapy is unquestionably the most important. In this day of speed and efficiency it is the duty of the physician to cure his patients as quickly and as completely as possible. X-ray gives prompt and permanent cures in a majority of cases. The object of this paper is to remind the physician of the advantages that his patients will derive from this valuable method of treatment.

X-ray, however, does not cure all cases of acne. So-called "acne vulgaris" or common acne has a multitude of clinical varieties. It is important to distinguish between them, because all do not respond favorably to X-rays. There is still a tendency on the part of certain dermatologists to defer X-ray therapy of acne until all other methods have failed. This is often a waste of time and discourages the patients, besides shaking their confidence in their physician and in Medicine in general. Instead of using X-rays as a last resort, it is best to study each patient carefully, to select the cases which respond to X-rays and treat them right away.

SELECTION OF CASES

Nodular or indurated acne—This type is characterized by the presence, in addition to the ordinary lesions of acne, of deep, red, hard, inflammatory nodules, usually painful. External applications are useless here, because the lesions are too deep. X-ray alone penetrates deep enough to influence these lesions, and X-ray gives excellent results in this type of acne.

Acne comedo—The skin is oily and numerous, rather large comedones are scattered all over the face, particularly over the cheeks. Usually only a few, red, inflammatory papulopustules are found, with a comedo in their center. This type also responds very favorably to X-rays. But the indications of this method are limited by the fact that acne comedo is most common in adolescents, and it is better not to use X-rays at that age.

Cystic acne—This term is used here to designate cases of nodular acne associated with the occasional formation of one or more cystic abscesses, the size of a pea or larger which, when incised, give issue to an oily, slightly purulent discharge, often containing white particles of sebum. It is a transitional type between nodular acne and acne conglobata. X-ray therapy is indicated here from the start because its results are as satisfactory as in nodular acne.

Acne conglobata—This is the most serious and disfiguring type, usually quite extensive. In addition to the familiar lesions of acne, there are large fluctuating abscesses, often elongated, covered with a thin violaceous skin. These fuse with each other and form long subcutaneous tunnels; they break open and give rise to persistent, discharging sinuses and keloidal scars. X-ray therapy is the only method of treatment that gives really satisfactory results in a large number of cases, but not in all. X-rays, therefore, should be used without waste of time. Unfortunately recurrences are quite frequent in acne conglobata, and lead one to ask whether larger doses than are now used would not give more permanent results. Extreme caution must be exercised in pushing beyond the generally accepted total dosage.

Acne rosacea, also called acne erythematosa, does not in reality belong under acne vulgaris. It is a separate disease, in which X-ray therapy is useless and, therefore, should not be given. This writer has acquired the conviction that the primary cause of acne rosacea is infestation with Demodex folliculorum, which is very easy to demonstrate in all cases of this disease. To Ayers and Anderson belongs the credit of bringing this to the attention of dermatologists. Acne rosacea will clear up remarkably well with the use of an ointment that can exterminate the parasites.

Acne with small papules—As the name implies, the lesions are uniformly small and superficial. In adolescents they respond easily to local applications of sulphur in various forms. In adults, this type of acne has proved, in the writer's experience, resistant to X-rays. He suspects that, in a number of such cases, Demodex infestation may have been the cause of the papular acneiform eruption.

In the remaining varieties of acne X-ray therapy has not been found of definite value.

OBSTACLES TO X-RAY THERAPY

Age—It is advised to refrain from X-ray therapy in patients under 18, because the results are not as satisfactory as later in life and recurrences are more frequent (Michael). The amount of X-ray that can be given to any one

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Dr. Miskjian was selected to write an editorial summary on the above topic by a committee of leading Ohio Dermatologists.

From Western Reserve University School of Medicine.

part of the skin being limited, it is best to use it when it has the greatest chance of doing the greatest good. On the other hand, however, one cannot sit back and watch a girl's or a boy's face become covered with scars without doing something about it. It is the present writer's practice to be guided in his decisions by the physiological rather than the chronological age of the patient. If the patient looks more developed physically than the average, he decides to use X-rays.

Previous X-ray therapy—When a patient with acne has already had X-ray treatments, it is necessary to act with great caution. If it is not possible to determine with certitude the amount given previously, and to find out whether the apparatus used had been properly callibrated, it is best not to give any more, no matter how tempting it may be to use X-rays.

TECHNIQUE

The aim of X-ray therapy in acne is to dry up the excessive secretion of the oil-glands as permanently as possible without injuring the skin. It must, therefore, be clearly understood that no results can be expected from a few small doses, given timidly. The cumulative effect of repeated doses is necessary, and it takes a good deal of X-ray to cure acne. It is, therefore, exceedingly important that the man who uses X-rays should be thoroughly familiar with all the intricate details of technique which experience alone, thoughtfully acquired, can teach. It is inexcusable, at the present time, to use an X-ray machine that has not been properly calibrated. The purpose of calibration is to show the output of a particular tube, measured in roentgens, the unit for X-ray therapy. Calibration is usually done with a Victoreen iontoquantimeter. Arithmetical computation of the erythema dose is unreliable and, therefore, out of date.

MacKee's technique consists of "75r of unfiltered X-rays applied once weekly to the affected areas . . . over a period of three or four months". Voltage used: 80-100 KV. Total dosage: 975-1275 r. Two exposures are given to the face, each focussed "on the outer end of the zygoma", with adequate protection of the eyes, eyebrows, scalp, ears and lips, as well as of the chest.

The present writer has been using a slightly different technique. One hundred fifty r. are given every two weeks, filtered through ½ or 1 mm. aluminum. Distance: 10 inches from the anode. Three exposures are made; one to each side of the face, and a third vertically to the forehead. While the face is being treated, the forehead is shielded with a piece of heavy lead-rubber; and the face is shielded, including the eyebrows, when the forehead is treated. All the details of technique cannot be described here, but one must be extremely careful to avoid even the slightest overlapping. Eight treatments are sufficient in the great majority of cases. Exceptionally, patients have been cured after only six treatments. The author has given as many as 10 treatments in certain cases of acne conglobata, but never more. The rule he has adopted is to give two more X-rays after all the lesions have disappeared. An erythema, no matter how slight, appearing in the course of treatment, calls for interruption of X-ray therapy for one to two months.

The reasons for the adoption of this technique are the following. A larger dose given at longer intervals hits the oil-glands a little harder. This method has also the advantage of bringing X-rays within reach of patients many of whom, being young, have limited resources. The use of a filter is based on the fact that the oil-glands are at a depth of 1-1.5 mm. in the corium. Biophysicists state that there is no great difference in penetration betwen unfiltered rays and rays filtered through a thin layer of aluminum. The present writer finds that there is an appreciable difference in the clinical results. The very fact that it takes longer to give a certain dose through a filter, no matter how thin, all other factors being equal, is proof that the filter excludes the very superficial rays which are of no use in the treatment of acne. One must bear in mind also that an acneic skin is not normal skin; it is thickened by the inflammatory infiltrate; in certain indurated varieties it may even reach a thickness of one centimeter or more. The use of a filter, therefore, would seem thoroughly justified.

It is advised to discontinue irritating local applications, such as lotio alba, while the patient is taking X-rays.

EFFECT OF X-RAYS

Usually no improvement is noticeable during the first half of the course of treatment. Then the active lesions become less numerous and smaller, and finally disappear altogether; the skin dries up; the comedones shrink and fall out. The patient's face looks cleaner. He is cured.

Sometimes the first few doses produce a temporary aggravation of the acne. The active lesions become larger and more numerous. It has seemed to the writer that, when this happens, the outlook for a complete cure is even more favorable.

Occasionally a marked improvement will set in after only two or three treatments of 150 r. each. This, however, is not frequent. It is in these cases that a course of six treatments, totaling 900 r., may be all that is needed.

RESULTS

After the treatment has been completed, the patient may continue to remain free from active lesions indefinitely. There may not even be a single scar left on the face. In some cases one or two superficial papules will develop now and then. These do not reach the stage of suppuration, they resolve fairly rapidly after a period of induration only. To prevent their appearance, the author prescribes the use of the usual "improved" lotio alba beginning two months after the course of X-ray has been completed.

Dermatologists are familiar with a recurrence that comes approximately six months after treatment with X-rays has been completed. Its incidence may be as high as 30 per cent. It would seem that the inhibitory effect of the rays on the oil-glands of the skin wanes; the seborrhea reappears, bringing with it the papules and pustules of acne. Usually the recurrence is not as bad as the original disease and yields fairly easily to other forms of treatment such as ultra-violet rays and local applications. Sometimes, however, especially in acne conglobata, it may be as bad as the original eruption. It is recommended to warn the patients of this possibility before treatment is started, so that the physician will not be blamed for the failure.

Contrary to the statements of various authors, the present writer has the impression that these recurrences are less frequent, if X-ray therapy is not discontinued as soon as the last lesion has vanished from the face. This is the basis for his rule to give two more treatments, to consolidate the cure, after the skin has cleared up completely.

Should a recurrence be treated with a second course of X-rays? This writer advises emphatically against it, particularly if 150 r. doses have been given and a total of 1500 r. has been reached.

X-ray therapy has been blamed for the scars that often mar the face of patients. It is now well established that the disease, not the treatment, is responsible for the scars. The sooner the disease is cured, the less scars there will be.

As in other branches of medicine, the dermatologist must treat the patient and not the disease alone. It is, therefore, his duty to correct any deficiencies or other evidences of ill-health that each patient may present. In doing this he must not have the illusion that he is treating the "etiological factors" of acne.

Regional Enteritis

In the acute stage, regional enteritis is confused with acute appendicitis. It is probable that when the disease is confined to the terminal ileum, surgeons will continue to make this diagnostic error because the signs and symptoms are so indicative of acute appendicitis that laparotomy will be performed when the acute process is diffuse. Generalized abdominal pain and distension suggests acute or subacute obstruction so strongly that a flat roentgen ray film of the abdomen will be taken in many instances. The finding of multiple dilated loops of small bowel with fluid levels in the absence of any definite cause of acute obstruction should lead the observer to consider the possibility of acute diffuse regional enteritis.

In the subacute stage the typical patient is a young adult male (80 per cent of our patients were under 40 years of age and males outnumbered females in the ratio of 3 to 2) complaining of colicky abdominal pain, loss of weight and generalized weakness. On abdominal examination, an appendectomy scar is seen often covered by a dressing because of a persistent fecal fistula. The abdomen may have areas of tenderness to palpation but a mass is rare. Auscultation of the abdomen reveals hypermotility of the small intestine. Serial films of the small intestine show a filling defect in the terminal ileum and multiple areas of dilated intestine proximal to this. The ileum may be so narrowed as to fill with only a thin column of barium, the string sign of Kantor. A tendency to acute exacerbations is characteristic of this stage of the disease and is of help in the diagnosis.

In the chronic stage, obstructive symptoms predominate and, in addition, patients exhibit manifestations of toxemia such as anemia and loss of weight. A palpable mass is usually present in the right lower quadrant or occasionally in the pelvis where it may be felt on pelvic or vaginal examination. Fistulous traits are common. Crohn states that it is the outstanding characteristic of this pathologic process. In the investigation of fistulous tracts having a possible intra-abdominal origin the first step should be to rule out regional enteritis.

The staff was able to diagnose only one third of the cases at the Henry Ford Hospital. The commonest reason for failure to arrive at a correct diagnosis was that regional enteritis was not considered in the differential diagnosis.—Lawrence Sidney Fallis, M.D., Detroit; Jour. Mo. S.M.A., Vol. 38, No. 10, October, 1941.

War and Disease

Whatever the outcome of the present war, we may be sure that disease will be the final victor, accounting for the largest number of victims and carrying on its deadly work long after the voice of the last gun has spoken. It has been said that the last war was exceptional in that for the first time the number of casualties from military action exceeded the number of victims of disease. That may have been true of certain armies during the period of hostilities, but it is emphatically not true when the victims of disease among civilians are taken into consideration. Every war produces conditions favoring the spread of disease, of which mass movements of population is one of the most important. In preparation for war the strength of armies is increased by recruits from villages and agricultural districts as well as cities. The former fall ready victims to such diseases as measles and mumps, meningococcic meningitis, and the pneumonias.—Frank Boudreau, M.D., N. Y. State Jour. of Med., July 15, 1940.

Occult Carcinoma of the Kidney With Metastases Simulating a Primary Carcinoma of the Nasopharynx

SIMON KOLETSKY, M.D.

THE patient, a 23-year-old white male, was first admitted to University Hospitals on June 20, 1940. He had been well until eight weeks before admission when he began to have numbness in the left cheek. This gradually spread to involve the entire left side of the face and was accompanied by pain in the same region. Physical examination, including ear, nose and throat examination by a consultant, was negative. Except for loss of light touch over the left face, there were no positive neurological findings. Examination of the blood and urine, and the Wassermann reaction, were negative. Encephalograms and X-rays of the chest, skull and sinuses, showed no abnormality. A diagnosis of left trigeminal neuralgia was made and on the twelfth hospital day a phenol injection of this nerve was performed. The patient received much symptomatic relief and was discharged on the fourteenth hospital day.

About one month later, in August, 1940, he began to have nasal obstruction on the left side. This gradually became marked and was associated with profuse nasal discharge. Numbness of the left side of the face had persisted. He was readmitted to the hospital on September 25, 1940 and discharged October 6, 1940. Physical examination was negative, except for posterior rhinoscopy which revealed a large tumor mass in the left nasopharynx. A biopsy of this mass was reported as papilloma, but malignancy could not be excluded. Urinalysis was negative. The red blood count was 4,700,000 and the hemoglobin 84 per cent. X-rays of the skull on September 28 showed a tumor mass in the left nasopharynx extending through the floor of the middle cranial fossa. A clinical diagnosis of carcinoma was made, and X-ray therapy to the nasopharynx was begun on October 3. The patient was discharged on October 6, to be followed in the out-patient department and to receive daily X-ray therapy.

There was a third hospital admission from October 14 to November 6, 1940. The patient complained of weakness, soreness of the mouth, and nasal obstruction on the left side. Neurological examination revealed marked reduction of the left visual field, involvement of the left third, sixth and seventh cranial nerves, and weakness of the left arm and leg. X-rays of the skull and sinuses showed a nasopharyngeal tumor extending into the left maxillary sinus and into the left middle cranial fossa. There was also destruction of the coronoid process of the left mandible. The clinical diagnosis was primary carcinoma of the left nasopharynx. Urinalyses were normal. The red blood count was 4,500,000 and hemoglobin 84 per cent. There was no further X-ray therapy after this discharge.

After discharge his condition rapidly became worse. There were marked anorexia, dysphagia, and complete loss of vision in the left eye. He was admitted to the hospital for the fourth time on January 2, 1941 and was discharged January 7, 1941. The tumor in the nasopharynx had extended into the mouth where there was a large fungating necrotic mass on the left side. A portion of this mass was removed by electrocautery and the pathological diagnosis was a well differentiated adenocarcinoma. Urinalyses were normal and the red blood count was 3,300,000 with hemoglobin 58 per cent.

Within the next five weeks there were three more hospital admissions for the purpose of resecting a portion of the tumor mass in the mouth to relieve obstruction. The tumor grew rapidly and filled a large part of the mouth. There were progressive emaciation, persistent anesthesia over the left trigeminal nerve, moderate ptosis of the left upper lid and paresis of the left internal rectus. Urinalyses were negative. The patient received supportive therapy and was given several blood transfusions.

The last admission was on March 2, 1941. The mouth contained a fungating grayish-black tumor mass. There was pitting edema over the sacrum and legs. The red blood count was 2,900,000 and the hemoglobin 40 per cent. For the first time the urine showed an occasional red blood cell. The patient became progressively worse and died March 18, 1941.

The final clinical diagnosis was adenocarcinoma of the nasopharynx with extension into the cranial cavity.

At autopsy (7331) the diagnoses were: partially differentiated papilliferous adenocarcinoma of the left kidney with direct invasion of the renal vein and metastases to regional lymph nodes, liver (massive), vertebrae and to the bones forming the floor of the left middle cranial fossa; from the latter situation the tumor extended directly into the left middle cranial fossa and into the left nasopharynx.

The upper half of the left kidney was replaced by a nodular tumor mass measuring 6 cm. in diameter. This consisted of soft, grayish-pink and yellow tissue which showed considerable necrosis and hemorrhage. There was invasion of the renal vein by the tumor, whose lumen was filled with a soft, friable thrombus as far as the orifice of the inferior vena cava.

The sphenoid, ethmoid and temporal bones forming the floor of the left middle cranial fossa were largely destroyed and replaced by a globular mass of tumor, 6 cm. in diameter, which projected into the cranial cavity. There was compression of the gasserian ganglion and of the brain in the region of the left cerebral peduncle and adjacent portions of the frontal and temporal lobes. The tumor in the left middle cranial fossa was continuous with a large tumor mass involving the entire posterior wall of the left pharynx.

Microscopically the tumor consisted of a partly differentiated papilliferous adenocarcinoma. The

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This is the sixth of a series of "Case Records Presenting Clinical Problems," selected by Dr. H. T. Karsner from the Clinical-Pathological Conferences of the Institute of Pathology, Western Reserve University and University Hospitals.

acini were lined by moderately pleomorphic cylindrical cells with vesicular nuclei and usually with a granular, pink-staining cytoplasm. In some foci there were small, compact masses of epithelial cells, many of which had a clear cytoplasm.

COMMENT

Clinically, this case was originally one of trigeminal neuralgia. Clinical and radiologic studies failed to reveal the cause of the pain. Three months later, however, the patient developed nasal obstruction and examination then revealed an asopharyngeal tumor which penetrated the bone at the base of the skull and extended into the cranial cavity. The pharyngeal tumor grew rapidly and portions of it were excised on several occasions to facilitate breathing. There were progressive emaciation and anorexia, and death occurred four months after the onset of the trigeminal neuralgia. The final clinical diagnosis was primary carcinoma of the left nasopharynx with extension into the left middle cranial fossa.

The autopsy, however, showed that the primary lesion was a carcinoma of the left kidney and that the clinical manifestations were due to metastatic tumor, in all probability originally to the floor of the skull and thence with invasion of the cranial cavity and the soft tissues of the left nasopharynx. At the onset of the trigeminal neuralgia, which was due to pressure by tumor on the gasserian ganglion, examination of the nose and throat revealed no lesion. Following this, however, a tumor appeared in the pharynx and its growth was very rapid. The primary neoplasm in the kidney was occult clinically throughout the patient's life. There were no urinary symptoms and numerous urinalyses were negative, except on one occasion several days before death, when occasional red blood cells were found.

The distribution of the metastases is somewhat unusual in view of the large lesions in the liver and the absence of metastatic tumor of the lungs. The latter is the more unusual because of invasion of the renal vein. There is no certain explanation of the route of the metastases from the renal tumor to the skull. It is possibly a retrograde passage of cells through vertebral veins.

A review of the biopsy material from the pharynx, originally diagnosed adenocarcinoma, showed the same type of cylindrical and columnar cells, as well as clear cells, as were present in the autopsy material. Since primary adenocarcinoma of the pharynx is usually composed of cuboidal cells of basal type, the clear cells found in the biopsy might have been suspected of being not primary but metastatic. Suspicion might have been directed clinically toward metastatic tumor when it was found that a lesion of the middle cranial fossa was followed by tumor in the nasopharynx.

Surgery of the Aged

Often transfusions are given to aged patients who are not actually in need of blood to prevent possible shock. The blood should be given slowly.

An operative procedure should be chosen which renders the most likelihood of success from the point of view of cure as well as morbidity. The basic principles in surgery of this group are timely, cautious, humane surgery.

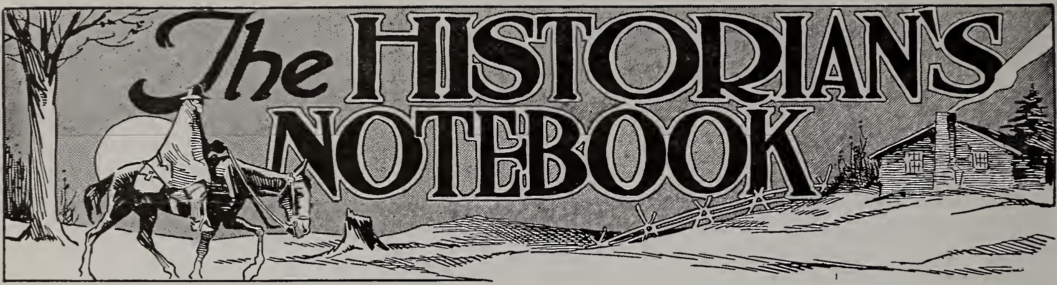
Immediately postoperative the patient should be given oxygen for ten minutes and should have hyperventilation with a carbon dioxide-oxygen mixture every hour for the first twenty-four hours. The cardiac output is increased thereby and the heart muscle is spared as much as possible. This is also a prophylactic treatment for pulmonary complications which these patients are most prone to develop. At no time is pitressin given because it produces coronary spasm (LeRoy).

Fluids should be used most judiciously. Murphy and his co-workers have said that regardless of the state of compensation in a diseased heart fluids must be given slowly, in small volume, and preferably in the form of isotonic solution. For this reason immediate fluid intake is not of primary concern and it is probably well that these patients undergo a certain amount of dehydration since old people tolerate starvation and dehydration well. The danger of excess fluid far outweighs that of inadequacy for a period of two or three days postoperative. Many times pneumonia is brought about by the injudicious use of intravenous fluids. Fluids given rapidly to a patient whom we must assume has Grade II heart disease may lead to the development of moisture in the lungs and subsequent pneumonia.

Postoperatively, these patients are somewhat of a problem as to just how much they should be allowed to move about, to have visiors and to become adjusted to their postoperative status.

If possible, as soon as the danger of secondary shock is past, these patients should be encouraged to move about freely in bed, sit up in bed, and be up in a chair on the second, third or fourth day. A Balkan frame and a trapeze attached over the bed allows more freedom of use and motion of the extremities. It is, furthermore, prophylactic treatment for pulmonary complications.

Members of the family should call upon the aged patient at an early hour postoperatively. The danger of excitement is minimal and is offset by a definite feeling of optimism created in the patient.—E. Lee Strohl, M.D., Chicago; Ill. M. Jour., Vol. 80, No. 5, November, 1941.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

Antitoxin, the New Cure for Diphtheria

A Copy of an Article That Appeared in the Cincinnati Post, October 20, 1894—page 5:

TRIED HERE,

Antitoxine, the New Cure for Diphtheria.

Used in the Cases of the Cohen Children,

ONE OF WHOM WAS SAVED BY IT.

The First of It Brought To America

Tried in the Children's Ward at the City Hospital.

Cincinnati is again in the lead as a center of medical research and experiment in America. While the Health Department of New York and the United States Marine Service are endeavoring to procure a supply of antitoxine from Europe, the Cincinnati Hospital has made a complete examination as to its value.

Antitoxine is an extract of the poison of the diphtheria germ prepared in the laboratory of Prof. Behring in Berlin. It is used in the form of a hypodermic injection—a single injection of a half ounce being the prescribed treatment for an ordinary case of diphtheria.

Dr. Whittaker of Garfield Place, succeeded in procuring a half ounce vial during his recent sojourn in Europe. This was the first antitoxine brought to America.

Drs. Herman and Reynolds, internes in the children's ward at the City Hospital, learned that Prof. Whittaker had the fluid in his possession, and made a request for it for clinical use.

After having shown the vial before the students of the Ohio Medical College, Prof. Whittaker willingly gave it to the young men, and they have used it with gratifying results.

"The patient in whose case we used the antitoxine, was Bertha Cohen, aged two years. The little girl, with three others, was brought to the hospital, from their home on Carlisle Avenue," said Dr. Herman. "One of the children has since died of diphtheria, but we shall be ready to discharge Bertha as cured in a day or two.

"When we gave the injection the child's temperature was 103, and there were spots of the diphtheria membrane on the left tonsil and on the uvula. The fluid was what is called by Prof. Behring 'Extract No. 2', which is quite strong, and is used in the milder cases. He also prepares an Extract 'No. 1', which is not so strong, and may be used in more severe cases.

"The entire half ounce was used in the single injection. The needle was inserted in the pectoral region, above the breast. The temperature soon rose two degrees, and fell until 18 hours after the injection, it was normal. The spots had entirely disappeared 36 hours after the injection.

"Our experience was gratifying and we hope that we will soon be able to get more of the antitoxine. I presume that there is no question that ours was the first experiment in America with antitoxine.

"Prof. Roux, of Paris, has treated over 200 cases, with a result that in cases received within 48 hours he has reduced the mortality to two per cent, and in cases received after four or five days, when the disease had fully developed, the mortality was 20 per cent. The usual mortality in diphtheria is 50 per cent.

"It is also said that an injection of one-twentieth of an ounce gives immunity. Children so treated may be kept with infected patients and will not take the disease."

Surgeon General Wyman of the United States Marine Service is now in Paris attending Prof. Roux's experiments. Dr. Herman Biggs, bacteriologist of the Board of Health of New York City has gone abroad to procure a supply of antitoxine.

Dr. F. W. Forchheimer, staff officer of the Children's ward, is a warm friend of Prof. Roux and has spent many week hours in his laboratory in Paris, where the antitoxine is now being experimented with. He has private advices of its success, and will endeavor to procure a large supply for the City Hospital.

Dr. Whittaker, when the *Post* reporter called upon him, said he was as much pleased with the outcome of the experiment as Drs. Herman and Reynolds.

"I am very glad," said he, "that at last something promises to be of avail in diphtheria. The action of antitoxine is like magic. Yes: I suppose the supply which I brought was the first which has come to America. I hope it will soon be plentiful."

The circumstances of the first use of antitoxine in Cincinnati, and perhaps in the United States are described by Dr. Chas. W. Reynolds of Covington, Kentucky, as follows:

"Dr. James T. Whittaker, Professor of Medicine in the Medical College of Ohio had just returned from Europe where he had learned of the experiments being carried on in the hospitals of France and Austria for a cure for the dreaded diphtheria. These experiments had been going on for five years. Dr. Whittaker attended the clinics, visited the hospital and he had actual experience in seeing what it was doing. So impressed was he, that he brought back two vials of Behring and Roux antitoxine for diphtheria.

"Returning to Cincinnati he gave his first lecture in the Lower Amphitheatre of the Old Medical College of Ohio, at that time on West Sixth Street on October 9, 1894, during the hour 12 and 1 P.M. His lecture was on the then new cure for diphtheria. Little did he then think that within a few hours the new remedy was to be given a trial, that was to be convincing as to its merit.

"At three o'clock of the day before Dr. Whittaker's lecture, there were admitted to the Cincinnati Hospital via the famous Ann Street entrance, four children of the Cohen family, at that time living on Carlisle Avenue, all afflicted with diphtheria.

"Two of these children fell to my service and the other two went to the service of the late Dr. George J. Herman, later of Newport, Ky.

"One can easily imagine what the presence of four children down with the dreaded disease and all of one family might make upon a young physician. The thought ran through my mind, "How many pine boxes will be needed?" In those days the mortality ran as high as 75 per cent. Just out of college six months and an interne for the same period, something within me prompted me to phone to Max Wocher & Son, then located in the College Building, to see if they had heard of any new cure for diphtheria. I did so, as it was customary for the students to go there and "talk shop". The young man who answered the 'phone stated that one of the students had been in just an hour before about 2 P.M., and had stated that Dr. Whittaker had spoken of a new cure for diphtheria. 'Phoning Dr. Whittaker's office, I found that his office hours were over at 3 P.M. I made arrangements to see him that evening. So after our supper. Dr. Hermann and I went to Dr. Whittaker's office. To my dying day, I will never forget that eventful evening, in the doctor's office, at his desk we sat. Dr. Hermann was on one side and I to the left of the doctor, who was between us. He told of what he had seen and what had been the results. We told him of the different cases, one with the membrane in the nose and throat with also some in the larynx—the oldest girl, the little brothers—around four and five years old, with advanced cases, and the youngest with a greatly inflamed palate, but no patches as yet. Temperature 99½°. The others had the same redness, but with patches. Dr. Whittaker advised us to use it on the youngest, as he doubted that the antitoxine, which he was going to give us would be enough to have any effect on the others. He had two vials—one he intended to use on his own family for immunizing purposes, if necessary. With the other we departed. Dr. Hermann and I agreed to use it together, both preparing the skin, where the puncture was to be made, both pushing the piston of the hypodermic syringe, so that if anything happened we would both shoulder the responsibity—our staff officers not having been reached so we were doing something on our own responsibility. The next morning a patch appeared on the soft palate, where only redness had been the night before. On the 12th, the patch was gone and the temperature had fallen to normal, from 103° that was there on the morning of the 11th. It thus came about that to Bertha Cohen, aged two years, there was administered the first antitoxine diphtheriae, used in America. She did not have any throat medication. The others were treated according to the methods in vogue at the time.

"The successful termination of Bertha Cohen's case as compared with what had been the general run of cases convinced the staff that a cure had been found for diphtheria. Immediately a supply was ordered from Germany, which arrived in time for the epidemic that swept the city in the following January. The mortality was about 6 per cent, which was very gratifying when it is considered that cases, many of an aggravated type were admitted when it was known that the General Hospital had a cure for diphtheria."

Laboratory Medicine

It has been our experience that many clinicians ask for glucose tolerance tests wholly without reference to the previous diet of the patient, and it must often happen that a patient in whom a glycosuria has been discovered will come to a glucose tolerance test after a period of restriction of his carbohydrate intake. Under these circumstances the danger of incorrect diagnosis is greatly increased and astonishing "cures" of diabetes may be encountered. Conn suggests that the glucose tolerance test should be preceded by a period of at least three days during which there should be adequate carbohydrate intake—for example, a diet containing 300 Gm. carbohydrate, 80 Gm. fat, and 2,800 calories daily. If this precaution is observed, our sugar tolerance tests will be more consistent and reliable.—Ralph G. Stillman, M.D., New York City; N.Y.S. Jour. of Med., Vol. 41, No. 21, November, 1941.

Plan To Meet Medical-Health Emergencies in Ohio Becomes Part of Civilian Defense Program; Important Duties Given Local Medical Preparedness Chairmen

CHAIRMEN and members of the Committees, on Medical Preparedness of the 88 component medical societies of the Ohio State Medical Association will be assigned leading roles in Civilian Defense activities in Ohio if a plan approved on November 5 by the Ohio State Council of Defense, headed by Governor John W. Bricker, is put into operation in Ohio cities and suburban areas under the direction of local Civilian Defense Councils.

The plan approved by the Ohio State Council of Defense recommends to each local Defense Council that it create a Committee on Medical-Health Defense, the duties of which would involve advising the local Defense Council as to plans which should be devised to meet medical and health emergencies and supervising activities to make such plans operable and effective.

MUST MEET LOCAL HAZARDS

In taking this action, the Ohio State Council of Defense recognized that one of the most vital phases of Civilian Defense under the National Preparedness Program is to meet the medical needs and public health hazards which may arise in any community as a result of sabotage in defense industries, disasters affecting defense industries, large concentrations of defense industries, employes of defense industries and military forces in relatively small areas, depletion of medical personnel in some communities, and, perhaps, incidents resulting from actual warfare.

An organization pattern for a Local Committee on Medical-Health Defense was incorporated as a part of the plan, providing for representation by various local groups and organizations which would assume the responsibility for carrying out medical and health defense activities.

DRAFTED BY THREE PHYSICIANS

The basic suggestions for the Ohio State Council of Defense's plan were presented by Dr. R. H. Markwith, State Director of Health and a member of the Ohio State Council of Defense; Dr. William S. Keller, Cincinnati, Senior Surgeon, Reserve, U. S. Public Health Service and Regional Medical Officer, Fifth Corps Area, Civilian Defense; and Dr. Robert Conard, Wilmington, chairman, Committee on Medical Preparedness, Ohio State Medical Association.

Following several conferences, these three physicians drafted a proposed organizational set-up for a Local Committee on Medical-Health Defense. Their recommendations were presented by Dr. Markwith to the Ohio State Council of Defense, and, as stated, were unanimously approved by that agency. Following is the complete text of the plan as recommended by Drs. Markwith, Keller and Conard, and as approved by the Ohio State Council of Defense:

PLAN FOR LOCAL COMMITTEE

"Because one of the most vital phases of Civilian Defense under the National Preparedness Program is to meet the medical needs and public health hazards which may arise in any community as a result of sabotage in defense industries or incidents resulting from actual warfare, it is imperative that adequate provisions be made at once for local organizations in Ohio which will be capable of handling such emergencies.

"Obviously, the first step must be for each community to establish a competent organization responsible for formulating and supervising emergency medical and health activities as a part of the Civilian Defense Program suggested by the Ohio State Council of Defense.

"Therefore, it is recommended that the Ohio State Council of Defense urge each Local Council of Defense to establish as a part of its organization structure a Committee on Medical-Health Defense, the duties of which would involve advising the Local Council of Defense as to plans which should be devised to meet medical and health emergencies and supervising activities to make such plans operable and effective.

"Further, it is recommended that the Ohio State Council of Defense suggest to each Local Council of Defense that the following type of organization be established by it so an emergency medical-health program can be carried on efficiently.

"1. Local Chief of Emergency Medical-Health Defense.

"A physician of broad experience and administrative capacity. (This is in line with a recommendation of the Medical Division, U. S. Office of Civilian Defense.) Such physician should be appointed by the Local Council of Defense and should be responsible to the chairman, Local Council of Defense. Since he should be a physician having the confidence of the local medical profession, the local medical society should be asked to nominate a member for that important assignment.

"2. Local Medical-Health Committee on Civilian Defense.

"A. **Chairman.** The chairman of this committee should be the Local Chief of Emergency Medical-Health Defense, referred to above.

"B. **Composition of Committee.** The Committee on Medical-Health Defense should be composed of a representative of each of the following groups and agencies:

"(1) A representative of the medical profession—a physician recommended by the local medical society. In some localities it may not be necessary to have a physician, other than the one selected as chairman, as a member of the committee. However, in larger communities it may be desirable to have at least one additional physician, perhaps several additional physicians, on the committee to relieve the chairman of routine activities. It would be desirable if the representative of the local medical society on the committee should be the chairman of the Committee on Medical Preparedness of the local medical society. Fourteen months ago, the Ohio State Medical Association formed a Committee on Medical Preparedness and a similar committee was established by each of the 88 component county medical societies of that Association. These committees, both state and local, have been functioning efficiently. While most of their activities to date have involved cooperation with the Selective Service System and War Department in assembling adequate medical personnel for Selective Service Boards and the armed forces, these committees are prepared also to take the lead in medical-health activities under the Civilian Defense Program It will add to the efficiency of medical-health activities in connection with Civilian Defense if these hand-picked and experienced chairmen of the preparedness committees of the 88 county medical societies of the state are named to represent the medical profession on the proposed local committees on medical-health defense. In most instances the chairman of the Committee on Medical Preparedness of the local medical society would make an ideal Chief of Emergency Medical-Health Defense, suggested under Paragraph No. 1.

"(2) A representative of the local hospital or hospitals. He or she should be experienced in hospital administration. If a local hospital organization exists, it should be requested to nominate a representative mutually satisfactory to the hospitals which are members of that organization.

"(3) A representative of the nursing profession. She should be a registered nurse with some administrative experience, if possible. If a local nurses' organization exists in the community, it should be requested to nominate a nurse for this assignment.

"(4) A representative of the health department having jurisdiction over that community—preferably the health commissioner.

"(5) A representative of the Red Cross who is familiar with and experienced in the first-aid instruction program of that organization.

"(6) A representative of the pharmacy profession. If a local pharmacy organization exists, it should be requested to nominate a person for this assignment.

"(7) A representative of the dental profession, nominated by the local dental society, if there is such a society in the community.

"(8) A mortician, or other person, capable of organizing procedure for the handling of bodies, ambulance services, and rescue squads.

"3. Functions of Committee on Medical-Health Defense.

No attempt will be made at this time to suggest the functions which should be performed by the Committee on Medical-Health Defense as these are adequately set forth in Medical Division Bulletin No. 1, Emergency Medical Service for Civilian Defense, issued by the United States Office of Civilian Defense. The important step at this time, in our opinion, is for the Council to see that local councils create a committee such as the one suggested, providing for representation of groups and agencies directly concerned with medical-health emergencies of Civilian Defense."

COPIES DISTRIBUTED

As *The Journal* went to press plans were being made by Courtney Burton, executive director of the Ohio State Council of Defense, to transmit copies of the suggested plan to the chairman of each Local Council of Defense so local medical-health defense committees can be created along the lines outlined at the earliest possible date.

A copy of the plan and a special bulletin have been sent by the State Headquarters Office of the Ohio State Medical Association to the chairman of the Committee on Medical Preparedness and the president and secretary of each county medical society.

In a statement prepared after the action of the Ohio State Council of Defense, Dr. Conard, chairman, Committee on Medical Preparedness of the Ohio State Medical Association, made the following pertinent comments on the plan and Civilian Defense in general:

STATEMENT BY DR. CONARD

"The Ohio State Council of Defense deserves congratulations for having approved what in my opinion is a sound and workable plan by which a local community can meet medical and health problems which may arise in this period of emergency.

"The plan provides for proper representation on a local medical-health defense committee of responsible groups, for orderly procedure and for prompt action.

"It delegates to the chairman of the Committee on Medical Preparedness of each county medical society, or some other qualified member of the medical society, important responsibilities and assignments. This is as it should be. Medical and health activities at all times should be under the guidance and supervision of the medical profession. Moreover, for more than a year the medical profession of Ohio has been organized for defense activities and has been taking a leading part in the National Defense Program. Being fully organized, it is ready to meet new responsibilities arising from the Civilian Defense Program.

"It is my sincere hope that each county medical society, each local medical preparedness committee, and the chairman of each local committee will cooperate in every possible way with the Ohio State Council of Defense and the Medical Division, United States Office of Civilian Defense. Although it may not be easy for us in the Middle West to get a mental picture of a bombing raid and other incidents of an actual shooting war, we must be thinking about such eventualities. But, the all-important thing at this time is that we must be prepared to meet the medical-health emergencies which may arise—are already occurring—from internal disorders and local disasters, arising directly or indirectly from the National Defense Program.

"The medical profession has never shirked its responsibilities and obligations in times of emergency so I am positive that it will take the leadership in medical-health activities as a part of the Civilian Defense Program in Ohio."

OPERATING PLANS FORMULATED

The Medical Division, United States Office of Civilian Defense, has prepared a number of bulletins and pamphlets outlining the functions of local medical-health defense committees, suggesting equipment which will be needed, enumerating necessary facilities, recommending organization procedures, etc. Undoubtedly, these will be made available through the Ohio State Council of Defense to local defense councils at the proper time. Copies will be distributed from time to time by the Headquarters Office of the Ohio State Medical Association to county medical society medical preparedness committee chairmen.

Dr. Keller, who helped to draft the plan approved by the Ohio State Council of Defense, will act as a liaison officer between the Medical Division, United States Office of Civilian Defense and the Ohio State Council of Defense and the defense councils of Indiana, Kentucky and West Virginia, the other states in the Fifth Army Corps Area.

Dr. Keller has been engaged in the practice of Medicine in Cincinnati for the past 35 years. He received his M. D. degree from the University of Cincinnati in 1904 and is a member of the staffs of Christ and Children's hospitals, Cincinnati, and was formerly a member of the teaching clinical staff at the Cincinnati General Hospital. For the past 23 years, Dr. Keller has been president of the Cincinnati Social Hygiene Society, and a member of the Coordinating Committee of the Cincinnati Public Health Federation. He is a former director of the American Social Hygiene Association, and served for five years as chairman of the Syphilis Control Committee of Cincinnati. He is a member of the Cincinnati Academy of Medicine, the Ohio State Medical Association, and the American Medical Association.

Seek Names of Medical Technicians

The Ohio Society of Medical Technologists is trying to find out the names of all technicians employed by private physicians, in order to make its mailing list as complete as possible. The society has requested physicians who employ technical assistants in their offices to send the names of these technicians to Ethel Lieb, chairman of the membership committee, whose address is: Institute of Pathology, Western Reserve University, Cleveland.

Annual Forum on Allergy Will Be Held in Detroit, Jan. 10-11

The Fourth Annual Forum on Allergy will be held in the Statler Hotel, Detroit, on Saturday and Sunday, January 10 and 11, 1942. On the Friday preceding, there will be clinics at the University Hospital in Ann Arbor, Michigan, conducted by Dr. John M. Sheldon and the staff. All reputable physicians are most welcome at The Forum, where they are offered an opportunity to bring themselves up to date in this rapidly advancing branch of medicine, through two days of intensive postgraduate instruction. For instance, the twenty study groups, any four of which are available to each attending physician, are so divided that those with special interests in medicine will be given continuity, in that one series deals with otolarnygology, ophthalmology, pediatrics, internal medicine, and dermatology—each running consecutively.

Attention is called to the fact that during these two days almost every type of instructional method will be employed by the 46 physicians appearing on the program.

The program includes special lectures by outstanding authorities; symposia followed by a 20-minute question and answer period; presentation of patients and a free discussion of their management; charts and educational exhibits; motion pictures and colored transparencies; the results of research; and, finally, an "Information on Allergy, Please?" where any question which has not been answered in the two days may be asked of competent authorities.

The second award of the Forum's Gold Medal for outstanding contributions to clinical allergy will be made this year to Dr. W. W. Duke, Kansas City, Missouri, who well may be called "the father" of this subject.

Ohio men on the program are: Karl D. Figley, Toledo; J. Warrick Thomas, Cleveland; Milton B. Cohen, Cleveland; Benjamin S. Kline, Cleveland; Ben C. Houghton, Columbus; Karl D. Way, Akron; John H. Mitchell, Columbus; William M. Mitchell, Columbus; Albert R. Zoss, Cincinnati; I. M. Hinnant, Cleveland; R. O. Egeberg, Cleveland; Clark P. Pritchett, Columbus; London McKinley, Cleveland; Leonard H. Harris, Elyria. The program was arranged and directed by Dr. Jonathan Forman, Columbus.

Physicians desiring a program or further information may address the Director, Dr. Forman, 956 Bryden Road, Columbus.

Cincinnati—New officers of the Cincinnati Society of Dermatology and Syphilology are: Dr. Harry L. Claassen, president; Dr. John Dalton, Indianapolis, Ind., vice-president, and Dr. Lawrence C. Goldberg, secretary-treasurer.

Medicine and Selective Service

LEWIS B. HERSHEY, Washington, D. C.
Brigadier General, U. S. Army; Director of the Selective Service System

Editor's Note:

● One of the high spots of the Annual Conference of Secretaries and Editors of State Medical Societies held at the Headquarters Office of the American Medical Association, Chicago, November 14 and 15, was an address by General Hershey, director of the Selective Service System. *The Ohio State Medical Journal,* believing General Hershey's remarks to be of extreme interest to the medical profession, is fortunate in having been able to obtain the accompanying transcript of General Hershey's talk, made available through the courtesy of The Editor of *The Journal of the American Medical Association,* which will publish the address in an early issue.

EVERYWHERE I go I am under the necessity of thanking some one for a great deal, and it is true here. With 99 per cent of workers in Selective Service unpaid, it is necessary to be continually thanking some one. I do not possess control of the English language adequately to tell you what the work of anywhere from twenty thousand to fifty thousand of the medical profession of America—I am not counting the dentists—has done in the last year in Selective Service.

First I want to talk about the changes that are being made in the physical examination setup; second, I will mention rehabilitation; third, I want to thank you for what you are doing along these lines and beg you to keep on and perhaps to extend.

PHYSICAL EXAMINATION

The law says that the Army or the Navy shall be the final authority on the physical qualifications of the man. That has always been true. A year ago the Army did not feel quite as well organized as it does now to carry all of the responsibilities. Three years ago we planned a system not unlike the one we are going to attempt to use now. We had looked at the experience of a World War in which a quarter of a million people had been sent, many times, several hundred miles from home under the assumption that they were to be, in fact were, members of the armed forces of the United States, only to discover after a final physical examination in the camps that they did not possess the qualifications that the Army at that time insisted on. These men were dislocated from their businesses and from their homes. They were at some distance in time and in space thrown back to reallocate themselves. We realized that three years ago. But a year ago we were not able to get the Army to assume what we thought it should assume, namely to have the physical examination as near as possible to the place where the man lives and to have an examination that was—whether good, bad or indifferent—nevertheless final. After all, there is no perfection in this world. Perhaps there is no adequate physical examination; but we must agree that this is a physical examination and abide by the results of it.

In the World War the Army refused to permit the Selective Service System to say: This man has the qualifications for a soldier. I think it was the intent of the original Selective Service Law in 1917 that the determination was to be made at the local board as to whether or not the man did have the qualifications. If he did he was inducted and became from that time forth a soldier. But we have had the confusion over the years, since the war, of the man who is discharged from the draft and the man who is discharged from the Army and the man who is discharged from every other thing, with some confusion as to the privileges that go with each of those several things.

We started out, however, with the dual examination. We tried to get the Army to bring its induction examination as near as we could in space, to the place where the man lived, under the assumption that this at least could cut down the travel when he was rejected. We did not solve to suit us, or the public, the question of time. Many a man received his watch from the chamber of commerce, received the good wishes of his best girl, went to an induction station and found himself trying to get in rather quietly that night to his home town after having been rejected at the induction station. This was unfair to the man and unfair to the medical profession. Obviously the examining surgeon did his best and used his best judgment to try to determine whether that meat and bone and blood and hair added up to an individual who could be a soldier. Some other individuals of the same profession looked at it and said contrariwise. No one was wrong; both were right, but it was unfortunate that they disagreed.

We are trying to correct this situation. We are trying, if we can, to eliminate conflict between technical people, conflict that we understand but which the public does not understand. The public hangs on the words of the medical profession almost as it does on those of the priest. It probably believes the doctor more than it does the lawyer. When two doctors disagree it is unfortunate for the faith that the individual has in the profession. It is unfortunate for the profession that doctors are forced into a position where there may be some loss of faith. We hope the system we are going to start now will eliminate the time element and the conflict element.

THE SUPPLY OF PHYSICIANS

All that has been said during the past year on the necessity of deferment of doctors, of interns, of residents, of medical students and even of premedical students should make it unnecessary to speak about the need for physicians. If there is a scarcity of man-doctor hours in the United States there is no excuse for duplication of effort. Whenever there is a physical examination here that is absolutely going to be duplicated there it cannot be justified when each man-doctor hour is important. We have a right to try to have a physical examination that does not need to be duplicated either in paper work or otherwise. Many honest hours might be given to saving life that medical men have been obliged to spend in putting figures down somewhere that might be improperly interpreted and, even if properly interpreted, would not lead to any action. Any time, any moment, any minute, any second we use in duplication is unwise. We are striving to try to make that which the medical examiner of the local board does complementary to what is being done later, rather than paralleling and duplicating.

THE SUPPLY OF MEN

We started with seventeen million five hundred thousand men, which seemed just lots and lots of men, but they have fallen out of the basket in one way or another. We do not have on hand as many as we should have with that large number. The fact that we are getting into somwhere near a shortage means that we must look over carefully the individuals we are rejecting.

I have no right to speak for the Army, but merely as one who has had some experience with it, and looking at it from the outside, I think it says "Here is an opportunity to have the healthiest Army any nation ever had." I think undoubtedly it has! I think it has a tendency to say "If there is any doubt about whether this man can pass or not, we will fail him." That is fine if there are enough men in the country to furnish the numbers wanted, but if the number is raised much from where it is now I fear we must depart from that. Hence we are tending to say to our medical examiners in this new method or modification of physical examination, "You in the local board reject the man who is manifestly unfit for service. Where there is a question in your mind about whether he is unfit for service, record especially what you know about his emotional behavior patterns and forward it, and let the Army, which, after all, is by the act vested with the responsibility of deciding in what cases it wants to take the chance and in what cases it does not, from what it sees of the man and what it learns from what you have recorded, decide what it shall do with him."

CHANGE IN FORMS

We are trying to get a single form, which will be called 221, I think, that will be initiated by the local board and sent with the man to the examining station. We will have one complete record rather than too many incomplete records of form 200 here and form 221 there.

COMPENSATION FOR PHYSICIANS

There has been, perhaps because of misunderstanding and perhaps because of actual disagreement, much criticism of us, that we were trying to dump overboard ten or fifteen thousand people who had labored long and well. No such thing. I did feel and I do feel now that the doctors of America have put out, uncompensated for, for Selective Service more than any other occupation. I do not believe we could expect to go on as we have in the last year, asking them to do this without compensation. I tell you frankly I don't want to try to operate Selective Service when we start on a pay basis, because the one thing that has kept us free from many undesirable things was the fact that we could get men who would work for nothing, who would not work for the wages the government could afford to pay. We have got something far beyond what you can hire at the wages we would expect to pay.

SERVICE OF PHYSICIAN ON DRAFT BOARD

I would like to make the medical examiner of the local board something above some of the drudgery that has been imposed on him. I wish I could get the local boards to be able to have their medical examiner give them more time in an advisory capacity. In this new change we look forward to a medical examiner as part of the board, not because he is going to do the examining, but because in hundreds of thousands of dependency cases, which involve 70 per cent of them, I find I have to have interpreted to me in a way I can understand a lot of the diseases of dependents. I should like to have these local boards have their medical examiner free enough so that he could say "That is what every 40 or 50 year old man has. Don't worry about that." Or say "He probably will die some time." But the words now supplied as reason for dependency might mean anything, from total disability to quite the contrary.

I would like to relieve the medical examiner as much as possible of the clerical work we have asked him to do. We have had some difficulty in interpreting what our form 200 means; I mention it with no criticism whatever. But these form 200's are made in sixty-five hundred different places under at least ten thousand different circumstances. They go all the way from being made by kerosene oil and candle to the finest places one could have for examining. The individual examiners—some twenty thousand or more of them—look at life differently. When we try to equate what they have recorded on form 200 we doubt a little some of the validity sometimes because of the impossibility of supervising the environment under which the examinations have been made.

I believe that if form 221 is initiated in the local board and used to reject the man who is manifestly unfit, used to record everything known about the man who is either supposed to be acceptable or supposed to be at least on the borderline, these form 221's fabricated in a hundred places can be supervised to the place that they will tell a definite and believable story about the men who are examined.

Summarizing the examination, we want the manifestly unfit man rejected; we want the doubtful and the acceptable man forwarded. With rehabilitation coming on, we must put the Army on the spot with regard to the doubtful case to learn to what extent the man must be rehabilitated before the Army will accept him. Otherwise, if we commence to rehabilitate all of the individuals we think are rehabitable we may have a difficult job trying to sell them to the Army.

REHABILITATION

The examiner of the future will, first, examine. Second, he will be recombing the people that have been rejected for individuals who, by re-examination, will prove they are fit for general service or who will be found to miss being fit for general service only by the degree that one can rehabilitate. He will be advising registrants as to what they should do to be rehabilitated, assisting many times as a community doctor in rehabilitating the individual and helping the local board and the state headquarters to exercise supervision in determining whether the man has been rehabilitated and in the, for us, rather difficult task of administering properly, efficiently and economically the fees connected with the rehabilitation. The advisory boards will, as they have in the past, tend to assist at times when the case seems a little beyond the capacity of the medical examiner.

The President decided that something must be done with regard to rehabilitation. Selective Service knew exactly who should do it—the Army. The Army wasn't so sure who should do it, but it knew exactly who shouldn't do it—the Army. At the end of the conference—I don't know whether it was because the Army was a better salesman or what—we came away with a child we thought we had rather safely put in some one else's lap.

This question of rehabilitation is a large one; not only rehabilitation to the general service level or to the class B level but bringing men from 20 to 40 per cent level, rehabilitating better citizens, without being soldiers, and rehabilitating members of the fair sex.

I am going to speak of rehabilitating individuals who are below the service level up to the service level. I shall not deal with rehabilitation up to the 1-B level. I shall not deal with rehabilitation from 20 to 40 per cent. The responsibility which the President put on us was attempting to push across the borderline the individuals who are hanging around the lower side of it. We feel that there are two or three hundred thousand individuals in that position.

We have asked the Army from now on, when it rejects a man, to say "Do you mean it or is he somebody that could be brought up to the level if something was done to him?" Shortly we shall ask the local boards to go back over these lists and try to find for re-examination men who have had a high pulse or high blood pressure and perhaps nothing wrong with them except that they were frightened or even tried to be in that position at the time they took the examination. We want the medical examiners to go back over these lists to find the individual who, by putting in a tooth or two, or something of that order, can be made a twelve-tooth soldier instead of a ten-tooth reject.

The first job is to take the individuals they are rejecting currently, second, to re-examine those who have some chance of becoming general service soldiers. These individuals will come back to the local board and, after consultation between the medical examiner of the local board and the man, will be given an opportunity, if he comes within the group we feel we can start with, to undertake rehabilitation at the expense, on a fee basis, of the United States in their local areas. Some of the individuals will accept it and some of them will not. We shall ask the Army to induct on a waiver those who do not. Otherwise, if there is no sting in the system I doubt seriously whether we shall accomplish much. If he accepts treatment, we visualize the individual being allowed to be doctored by the professional man he wants to choose. If he is too far away, we feel it is only fair to ask the registrant to pay his own way. We shall have to exercise some sort of control, especially over any physicians who may not do satisfactory work. We must have, after the job is done, approval by the local examiner or, if he needs help, by the medical advisory board, so that a selectee can be sent back to the Army for recheck and supposedly for induction. We must have help from the medical examiner and the medical examining board in taking care of the payment for these cases.

EDUCATION

You have been kind enough to listen to some of us at your national meeting. We do not want to be forward, but we would be glad to have that privilege continued. We hope next year in the Summer, if it is reasonably cool and nice at Atlantic City, as I believe it will be, to bring an exhibit there. We understand that the American Medical Association, on occasion, speaks to a listening world of medical men. It might be that the time will come when we have words urgent enough that we might want you to say something in order to get them out, and get them out rapidly.

We shall be glad to give you any information for the preparation of such articles. We have no desire to send out canned information. The Selective Service System attempts to be decentralized. It probably would be the first to act on the impetuses that come from below rather than hand me down, ready made clothes from above. We did not give the pattern for the cloth to be worked up. The local board is different. They wear different styles in Indiana from what they wear back East. I would rather be criticized for that than to be able to tell at any moment what any local board in the United States was doing. I am still a small town man on Saturday and a country man the rest of the week.

We have had a very satisfactory arrangement during the past year. At your request we have sent people to participate in your state programs or, better still, you got your medical officer in your own state headquarters to take part. He knows more about the national picture than we do. He is no more confused, regardless of what you may think, and he knows a great deal more about what happens out in your state than we do. By and large, he ought to be a better man for you than any of us.

We do believe there might be, in the next two of three months, an excellent opportunity for joint meetings between the medical profession and the dentists in the several counties for consideration of the requirements of the Army and Navy. No one knows what day and hour the Navy may need some individuals they cannot get by some other process of luring in. We believe the question of rehabilitation, both medical and dental, will be something that most of these medical societies will be glad to know about.

FEES FOR REHABILITATION

I have two or three questions I shall raise. I should like to have any one give me the benefit of his information on what he thinks of the fees that the experience of the Veterans Bureau has developed for the treatment of different types of cases.

NEUROPSYCHIATRIC CASES

I should like to come on my knees, or any other way, to have the benefit of any one who may have experience on what to do about neuropsychiatric and alleged neuropsychiatric cases. I have had, for ten years and more, a definite interest in the peculiarities of human beings, especially as they keep an individual from being a good flier or a good driver of a tank or otherwise participating in modern war. No one has more sympathy than I have in the necessity for the Army to reject men who will not, under modern conditions, make soldiers, if we know what kind of individuals they are and if we know how to recognize them, or if we can instruct one hundred or two hundred men in that ability. It does not make much difference if one or two persons have that ability unless we can pass it on, because the decision has to be made in at least a hundred places. But I am frankly disturbed, and I have been brought to this point many times by talking with my medical examiners here and there over the coutry, when they say "I have known the boy since birth, and before, and I rather reject the idea that some one in Milwaukee or some other place in seven or eight minutes can find out things I have not been able to discover; with some knowledge of the human being and having made my living for forty years, or such a matter, practicing medicine, and thinking that even though I am not an expert in that field, after all I know something about human beings, I rather reject the idea that some one can discover on such short notice that he possesses some of these disqualifying things."

I am frankly disturbed by the number of people turned down. I heard Dr. Abell speak this morning about the individuals who are not making the adjustment after they get to camp, and I am not surprised. Sometimes it does become a serious public relation when 40 per cent, as I know of in one place, of the people have been rejected because they presumably are individuals who might become or were neuropsychiatric. If we get so that there are more than 51 per cent of that variety, I think the thing to do then is to have the kind of war that you can turn over to the majority, rather than expect the minority to wage it.

MEDICAL STUDENTS

The students are not by any right deferred. The law not only says they are not deferred but it says specifically that no class will be deferred. I think that in violating the law I have done pretty well by the medical students. I have done so well that sometimes I have actually been disturbed. But that is all right. I am perfectly willing, if for the greater good one must do the lesser evil. However, the local boards, I can't claim, have been told not to take these people. They have been told that they may defer them, and "may" apparently was in capital letters because, by and large, they have not. They have taken some who had been accepted for medical colleges and had not gotten in. I have the unfortunate task of trying to do something, after I get home, about a fellow who went to the wrong college. I don't know what the answer is going to be, but it isn't going to be right, whatever it is; I can assure you of that.

I am interested in protecting the medical profession, and I am perfectly willing to believe that all the things I have heard about the necessity for physicians are true. I am not so sure that we would do much better even if we had a law. We are faced continually, of course, not only with medical students but also with other students, chemists and a thousand other types of people.

I do believe you occupy a peculiar position in the minds of the people, when they make up their minds. I don't know whether you are going to kill the goose that lays the golden egg if you start the landslide on the other side. I don't know, but we shall continue, regardless. The law would make it easy for us. We could administer, we hope, easier than we could exercise judgment, but we have done much better than I expected. The only reason is that you have been pretty good salesmen. You still do have some of that combination that came from long ago when the medicine man was something a little more than a human being. May you continue to be.

I want to read a poem:

Ten little registrants standing in a line.
One joined the Navy, then there were nine.

Nine little registrants sitting on a gate.
One broke a vertebra, then there were eight.

Eight little registrants, talking 'bout heaven.
One went conscientious, then there were seven.

Seven little registrants, what a strange mix!
One became a pilot and then there were six.

Six little registrants very much alive.
One went and drowned and then there were five.

Five little registrants full of canny lore.
One stole a pig and then there were four.

Four little registrants, spry as they can be.
One became twenty-eight, then there were three.

Three little registrants, all alone and blue.
One fed his relatives, then there were two.

Two little registrants, what can be done!
One went to a psychiatrist, then there was one.

One little registrant classified 1-A.
Physically, mentally, morally okay.

One little registrant to tote a big gun.
He got married and then there were NONE!

"Doctors At Work," the A.M.A. Radio Program to Be Resumed Dec. 6

Doctors at Work, the dramatized radio program broadcast by the American Medical Association and the National Broadcasting Company will go on the air for its second season on the Red Network beginning December 6, from 5:30 to 6:00 P.M. Eastern Standard time and will be continued each succeeding Saturday at that time.

These programs are considered to be the outstanding opportunity for the American radio listener to obtain unbiased facts about the medical profession and its work in safeguarding the health of the people. Ohio physicians can do much to promote the series and stimulate local interest in it by discussing it with their patients and by indicating to officials of NBC Red Network stations, when the opportunity presents itself, that they are interested in it.

This series of programs will be a "sustaining" feature. That is, broadcasting it will be optional with local station officials since no revenue is derived from it. If the station is convinced of its value and importance, it will probably choose to offer the series to its listeners as a public service instead of selling the same time to a commercial sponsor.

Red Network stations in Ohio are: WLW, Cincinnati; WING, Dayton; WCOL, Columbus; WSPD, Toledo; WTAM, Cleveland; WLOK, Lima; WIZE, Springfield; WHIZ, Zanesville.

Doctors at Work, a successful, serialized story broadcast last year dealt with the experiences of a fictitious but typical American boy choosing medicine for his vocation and proceeding to acquire the necessary education and hospital training for the private practice of medicine. Interwoven with the personal story of young Doctor Tom Riggs and his fiancee, Alice Adams, was the romance of modern medicine and how it benefits the doctor's patients.

The new series of broadcasts will resume where last year's story left off, namely, with the marriage of Tom Riggs and Alice Adams, and the subsequent life of a young doctor and his wife in time of national emergency in a typical, medium-sized American city.

The program will be produced under the supervision of the Bureau of Health Education, of the American Medical Association, W. W. Bauer, M. D., Director. Scripts will be by William J. Murphy of the National Broadcasting Company, author of "Your Health," "Medicine in the News" and "Doctors at Work." The scripts will again be produced by J. Clinton Stanley and the National Broadcasting Company orchestra will be under the direction of Joseph Gallichio as heretofore. Actors will be drawn from the well-known group of Chicago radio actors previously heard in American Medical Association and other successful broadcasts.

Procurement and Assignment Service for Physicians, Dentists and Veterinarians To Meet Emergency Needs Is Created: How New Agency Will Operate

An important step toward providing an orderly procedure for utilizing the medical personnel of the country to the best advantage during the present emergency was taken on October 31 when President Roosevelt approved an order establishing a Procurement and Assignment Service for Physicians, Dentists and Veterinarians as a part of the Office of Defense, Health and Welfare Services.

This action was in line with a resolution adopted by the House of Delegates of the American Medical Association at its meeting in Cleveland last June.

Also in keeping with the A.M.A. resolution which urged that such an agency if created should be under the direction of representatives of the civilian medical profession, the President named the following board to administer the new procurement and assignment service:

PERSONNEL OF BOARD

Chairman, Dr. Frank H. Lahey, president of the American Medical Association; Dr. Harold S. Diehl, dean of the Medical School, University of Minnesota and a member of the Education Committee of the Health and Medical Committee, Office of Defense, Health and Welfare Services; Dr. James E. Paullin, retiring president of the American College of Surgeons and chairman of the Council on Scientific Assembly of the American Medical Association; Dr. Harvey B. Stone, member of the Committee on Medical Preparedness and the Council on Medical Education and Hospitals, American Medical Association; and Dr. Caleb Willard Camalier, Jr., a past president of the American Dental Association and a member of its Committee on Preparedness.

Pointing out that a fundamental purpose of the new agency will be "to stimulate voluntary enrolment" of members of the three professions, *The Journal of the American Medical Association* in an editorial in its November 8 issue, also presented the following description of how the Procurement and Assignment Service will operate:

HOW SERVICE WILL FUNCTION

"The functions of the agency now established include primarily the procurement of personnel from existing qualified members of the professions concerned. It is proposed that various governmental and other agencies requiring professional personnel for needs related to the emergency shall send their requests to the Procurement and Assignment Service indicating the number of men desired, the time during which they must be secured, and the qualifications and limitations placed on such personnel. The Service may then by appropriate mechanism arrange to secure lists of professional personnel available to meet these requirements, utilizing existing rosters such as the one now available in the headquarters of the American Medical Association and of the American Dental Association, or other public and private rosters which it may consider acceptable. The agency is also authorized to approach such professional personnel as are considered to be available and to use suitable means to stimulate voluntary enrolment. Emphasis should be placed on the fact that voluntary enrolment is desired and that modern means of procurement will be utilized. Already the states and many of the counties of the United States have been organized for military medical preparedness through the Committee on Medical Preparedness of the American Medical Association. Thus it becomes possible to determine availability of various physicians and their qualifications for special services. Obviously it is possible also in this way to protect the civilian needs of American communities.

"In its work the Procurement and Assignment Service is authorized to procure an executive secretary who shall serve as executive officer and who is to be a full time appointee with a salary. The members of the board which administers the agency are to serve, as does the Health and Medical Committee, whose organization it parallels, without salary. The board is authorized to secure such necessary assistants as may be required, to establish advisory committees and subcommittees representing the various interests which may be concerned, to develop suitable liaison with governmental and private agencies, to establish suboffices if they are required, and indeed to do almost everything, short of compulsion, that may be useful in supplying the Army, the Navy, the Public Health Service, essential industries and the civilian population with necessary professional personnel."

Since its organization, the Procurement and Assignment Service for Physicians, Dentists and Veterinarians has named sub-committees to consider the problems of medical, dental and veterinary schools, hospitals, industrial health, Negro physicians, public health and women physicians. An office has been established in Washington and regional offices have been set up in Chicago at the headquarters of the American Medical Association and the American Dental Association.

NEED FOR PHYSICIANS REVEALED

That there is a real need for an agency such as has been established through which medical and health needs can be met by voluntary enrolments and by better distribution of medical personnel is revealed by data recently assembled by the Committee on Medical Preparedness of the American Medical Association. That the question of supplying enough physicians for the present emergency and to meet future needs is a serious one is indicated by the following data and statistics:

U. S. Army—At present the United States Army consists of approximately 90,000 officers, 6,000 nurses and 1,480,000 enlisted men. Of the officers, approximately 14,000 are in the medical department, including 11,465 in the Medical Corps of whom 8,983 are reserve officers, 1,250 regular officers and 1,232 National Guard officers. If a formula of six medical officers per 1,000 men is applied, there is at present a shortage of about 1,473 medical officers. Even if the size of the Army is not expanded, it is estimated that a maximum of approximately 3,200 medical officer replacements would be required each year during the five-year period of the Selective Service Act. This estimate is based on the possibility of about two-thirds of the physicians now in service remaining in the service for the period of the emergency. If less than two-thirds should remain in the service, the number of annual replacements needed would be greater than 3,200. It is doubtful if replacements, let alone additional needs in case the Army is expanded, can be met entirely from the yearly supply of physicians completing their medical education. Medical schools are graduating approximately 5,000 students each year and about that number are completing internships annually. However, a portion of the 5,000 potentially available for the Army cannot pass the physical examination and others are needed for medical services in war industries. Some who are not in the Reserve Corps would not be available for active service under Selective Service because they would be over 28 years of age or would have dependents.

U. S. Navy—Expansion of the regular Navy Medical Service has satisfied the present needs of the Navy for medical personnel, except approximately 100 replacements. By the middle of 1942, approximately 700 additional medical officers will be needed by the Navy which has a pool of 1,000 Reserve Officers.

U. S. Public Health Service—This service normally requires about 35 new officers each year for replacements, but because of expanded activities due to the emergency, about 100 interns in public health service institutions will be required within the next year. In addition, state health departments require about 150 additional physicians to meet new functions.

U. S. Veterans' Bureau—The Bureau has about 1,800 full-time physicians of whom 500 are officers in the Army Reserve Corps. Should these 500 men resign or enter active military service, replacements totaling 500 would be needed.

U. S. Civil Service Commission—Various governmental agencies which are supplied physicians by the Civil Service Commission employ about 2,000 physicians and need about 400 physicians annually for replacements or for new positions. The Commission needs 250 physicians to meet present requirements.

General—In addition to the above needs, physicians are needed in some communities for service with defense industries, for Selective Service administrative positions, and for civilian needs because physicians have been called into military service.

Dr. Worstell Named Medical Supervisor of State Industrial Commission

Dr. Worstell

Dr. Henry Paul Worstell, Columbus, acting supervisor of the Medical Section, State Industrial Commission since the resignation of Dr. Sidney McCurdy, was appointed supervisor by the Commission on November 13. Dr. Worstell is well-qualified in education, training and experience for this important post. After graduating at the State University of Iowa College of Medicine in 1928, Dr. Worstell served two years of internship at Mercy Hospital, Toledo. This was followed by two and one-half years of postgraduate training in orthopedic surgery under Dr. Arthur Steindler at the University Hospital, Iowa City, Iowa. After specializing in this field in Columbus in private practice for three years, Dr. Worstell became orthopedic consultant for the State Industrial Commission in 1936, and in November, 1938, was appointed assistant supervisor of the Medical Section. A member of the American Academy of Orthopaedic Surgeons, Dr. Worstell is also certified by the American Board of Orthopaedic Surgery, and is a member of the Ohio State Medical Association and the American Medical Association. He is a lieutenant-commander in the Medical Corps of the United States Naval Reserve.

Do You Know - - -

Dr. Harry V. Paryzek, Cleveland, President of the Ohio State Medical Association, spoke at the dinner sessions of the Postgraduate Days in McConnelsville, Dennison, Ashland and Springfield. He urged county society officers to study the need and practicability of medical service plans in their communities.

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Claims filed with the State Industrial Commission during October, 1941, totaled 30,035—an all-time record, and an increase of 58.5 per cent over the 18,945 claims filed in October, 1940.

* * *

Any county medical society may borrow the exhibit entitled "How To Gear Your Community for Better Health," which has been prepared by the Bureau of Public Education, Ohio State Medical Association. On a panel six feet long and four feet high it depicts graphically the relationship between the medical society and other groups interested in community health.

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Dr. Albert B. Sabin, associate professor of pediatrics, University of Cincinnati College of Medicine, was recently awarded a prize of $300 by the American Academy of Pediatrics for outstanding research in that field.

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Dr. Secord H. Large, Cleveland, was re-elected comptroller of the American Academy of Ophthalmology and Otolaryngology at its recent annual meeting in Chicago.

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The seventy-fifth anniversary of the founding of the Union District Medical Association, comprising Ohio and Indiana physicians, will be celebrated next May at Oxford, the birthplace of the organization.

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Dr. Norris W. Gillette, Toledo, is the new president of the Association of Surgeons of the New York Central System.

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Dr. Louis Klein, director of clinical research at Hoffman-LaRoche Inc., since 1935 and formerly associated with the Parke Davis Company, died at his home in Upper Montclair, N. J., October 24.

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Dr. William E. Lower, a past-president of the Ohio State Medical Association and the Cleveland Academy of Medicine, was honored with a testimonial luncheon at Cleveland, October 16, by friends and associates at Lutheran Hospital, of which he was chief of staff for 24 years.

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The November, 1941, issue of *The Journal of Medicine*, Cincinnati, was dedicated to the memory of the late Dr. Henry B. Freiberg, prominent Cincinnati urologist.

Dr. F. C. Anderson, for 21 years superintendent of the Ohio State Sanatorium at Mt. Vernon, has resigned to enter private practice. His successor, appointed by State Welfare Director Charles L. Sherwood, is Dr. I. S. Rian, formerly assistant physician at the Massillon State Hospital.

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Cincinnati voters approved a $1,500,000 bond issue for improvements to General Hospital, and a $3,500,000 bond issue for a new county home, at the November election. Dr. L. Howard Schriver, Councilor for the First District of the Ohio State Medical Association, was chairman of the physician's committee which actively supported the pre-election campaign.

* * *

Ohio's poor relief load dropped in October, 1941, to 42,188 cases, lowest figure since the state began compiling records in 1933. The peak load was in January, 1935, when there were 341,053 cases.

* * *

Dr. Allen W. Freeman, Baltimore, Md., formerly Ohio Commissioner of Health, has been named president-elect of the American Public Health Association.

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Dr. John H. Skavlem, Cincinnati, was elected vice-president of the Mississippi Valley Conference on Tuberculosis, at its recent meeting in Columbus. Robert G. Paterson, executive secretary of the Ohio Public Health Association, received the Hoyt E. Dearholt Medal, an award for outstanding work in the tuberculosis field in the conference states.

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The Woman's Auxiliary to the Hempstead Academy of Medicine of Scioto County is sponsoring a health education program over Radio Station WPAY, Portsmouth. Arranged by Mrs. S. L. Meltzer, president of the Auxiliary, the program, known as "The Health Reporter" is being broadcast at 6:45 P.M., each Monday, Wednesday and Friday, and lasts 15 minutes. Material for the programs is being furnished by the Ohio State Medical Association and the American Medical Association.

* * *

At the semi-annual meeting of the Ohio Public Health Association held in Columbus, November 14, the following eight physicians, all former presidents of the Association, were elected honorary members of the Board of Directors: Dr. Charles A. Doan, Columbus; Dr. A. C. Bachmeyer, Chicago; Dr. C. B. Bliss, Sandusky; Dr. C. D. Selby, Detroit; Dr. C. W. Kirkland, Bellaire; Dr. Harry F. Rapp, Portsmouth; Dr. Charles A. Neal, Cincinnati, and Dr. E. L. Brady, Marion.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Recent Postgraduate Programs Given "Best Yet" Rating

One of the finest postgraduate programs ever presented by the Ohio State Medical Association was given at five regional centers on five different days in November. The Committee on Education of the State Association deserves a great deal of praise for having arranged such outstanding presentations on medical questions of current importance.

Not enough compliments can be paid to the following speakers who made real sacrifices, without even a thought of remuneration, to deliver the lectures: Dr. James G. Kramer, Akron; Dr. William B. Bean, Cincinnati; Dr. A. C. Ernstene, Dr. Donald M. Glover, Dr. J. M. Hayman, Jr., Dr. Arnold F. Sydow, Dr. H. P. Taylor, Dr. Spencer A. Wahl, Dr. Chas. T. Way, Cleveland; Dr. Earl H. Baxter, Dr. H. M. Clodfelter, Dr. Dana W. Cox, Dr. Jonathan Forman, Dr. Chas. W. Pavey, Dr. C. C. Sherburne, Columbus; Dr. Sterling H. Ashmun, Dayton; Dr. Martin W. Diethelm, Toledo. Each speaker did a splendid job, handling his subject so that all in attendance could take away many ideas to be used in practice.

Local arrangements were handled efficiently by physicians located in the centers. Local chairmen who deserve special commendation for their efforts were: Dr. C. E. Northrup, McConnelsville; Dr. R. E. Wolf, Uhrichsville; Dr. L. H. Martin, Ashland; Dr. G. M. Lane, Springfield; Dr. I. P. Seiler, Piketon.

The only disappointing factor was that of attendance. Total attendance for the five meetings was 442, divided as follows: Springfield, 171; Piketon, 79; Ashland, 78; Dennison, 64; McConnelsville, 50. It is true that the Weatherman performed some dirty tricks on days of the McConnelsville, Dennison and Ashland meetings. Also, it must be conceded that physicians probably are busier now than they have been for many moons. Yet, it is just too bad that the total attendance wasn't several times larger. Those who missed these meetings really did themselves an injustice. In these days when new developments in medicine are taking place so rapidly, no physician can afford to pass up such outstanding opportunities for postgraduate refresher work—especially when they are offered so close to their homes. We feel sure that the 442 who had the privilege of enjoying the 1941 lectures will agree.

New Army Ruling Regarding Promotions Should Be Repealed

Elsewhere in this issue will be found data showing that the Army is in need of medical officers. In keeping with tradition we are confident that the medical profession will respond to meet this need — especially if international conditions become more acute.

Nevertheless we believe that the War Department has made a serious blunder in adopting a policy providing that all promotions above the grade of major are temporarily suspended as far as reserve officers are concerned. Certainly this policy will not have a favorable effect on the morale of medical officers now on active duty and it will not encourage new enlistments in the reserve corps. If reserve officers who merit promotions because they can meet the regular requirements for obtaining a "certificate of capacity" are arbitrarily held back, they are going to become discouraged and lose their incentive. Resignations at the first opportunity may be anticipated. Moreover, as stated, this unfortunate ruling will make it harder for the Army to sell itself to the potential candidate for a reserve commission.

Perhaps by the time this is in print the War Department will have repealed the ruling referred to. We hope that will be the case. Politics —even Army politics—should not be tolerated in the National Defense Program. If there ever has been a time when ability and capacity should be at a premium in the Army, it is now. Rules which stand in the way of this goal should be relaxed or junked.

Bouquet Handed Our Handbook on Medical Service Plans

Glancing through the November issue of *The Medical Annals of the District of Columbia,* we found the following editorial relative to the "Handbook on Medical Service Plans" recently prepared and issued by the Committee on Medical Service Plans of the Ohio State Medical Association:

"The Ohio State Medical Association has just issued a Medical Service Plan Handbook containing recommendations to its component societies 'as to proper procedure for starting voluntary non-profit medical care plans under the provision of the Ohio Enabling Act.'

"Procedures for the establishment of medical service plans are set forth. These are specific and complete. Included also is the resolution adopted by the House of Delegates relating to the Ohio Enabling Act and a copy of the Act itself.

"A valuable feature of the handbook is the 'must' and 'optional' reading list. The list includes books and articles on medical economics from every point of view.

"The handbook, which is being provided the president and secretary of each county society, shows the care and thought that have gone into its preparation. The Ohio State Medical Association is to be commended for a task well done."

The Medical Society of the District of Columbia has done a lot of thinking on the question of medical service plans. If it thinks well of the handbook issued by the Ohio State Medical Association, the handbook must have merit. It is to be hoped that the medical societies of Ohio will take this as a hint that they should study the handbook carefully if they have not already done so. Unless the suggestions contained in the handbook are transformed into action, the handbook will not have served its purpose.

Services of Local Physicians Still Needed By Draft Boards

Ohio Selective Service's new method of having registrants undergo but one physical examination by a team of army-civilian physcians prior to induction is working smoothly in sections of the state where it has gone into effect. By the first of the year Selective Service hopes to have the new plan in operation in all parts of Ohio.

However, as was pointed out in *The Journal* when the new plan was announced, it will be necessary for all local Selective Service Boards to occasionally make use of local physician-examiners. That is the reason that none of the local physicians who have been appointed medical examiners has been officially released from active duty, although many of them are not being called upon to make examinations—at least not nearly so many as during the past year.

There are instances when a local draft board will want medical advice and perhaps a "screening" examination of some registrant who has some obvious defect which disqualifies him for active military service. Local boards have been ordered to ask registrants if they have any major deformity or disability that would obviously disqualify them for service. In event some registrant answers in the affirmative or it is quite apparent to the draft board that a registrant is not physically fit for active service, the board is expected to have such registrant examined by a local physician-examiner and to certify the physician's findings to Selective Service Headquarters. This plan will assist the Army Examining Board and, also, will promptly eliminate registrants who are certain to be turned down by the team examiners.

Hundreds of Ohio physicians have been doing a splendid and patriotic job for Selective Service. The new examination plan will ease their work considerably. Yet, Selective Service is counting on them to act as medical consultants for their local draft boards and to make examinations in unusual cases such as has been described. The Medical Advisory Boards also will be called upon for investigations in doubtful and disputed cases. We are confident that local and advisory board physicians will continue to cooperate on request.

Maybe It's Because You're Not Doing A Thorough Job

As long as magazines and newspapers continue to cater to a health conscious public by printing patent medicine ads and by publishing articles on medical and health subjects (some of the articles being of doubtful value and others downright harmful) the public will find itself in a state of confusion and the members of the medical profession will grumble.

We might just as well face realities. We are not optimistic enough to believe that the day will ever come when all magazines and newspapers will discontinue carrying ads of health fads and fancies or that the day will ever come when every health article appearing in the lay press will be 100 per cent accurate and praiseworthy.

Although the efforts of the medical profession to educate publishers as to the rights and wrongs in medical and health publicity should be continued, the problem also must be approached from another angle. Perhaps if more physicians were to be more energetic in trying to help their patients understand some of the medical and health questions which bother them, fewer individuals would depend on the magazine article or the newspaper column for their health advice.

In our opinion the point we want to get across is emphasized in the following excerpt from an editorial, "Weight Reduction Diets" published in a recent issue of *The Journal of the American Medical Association:*

> "Recently several magazines with a combined circulation of many millions have been publishing diets for reduction of weight. For the most part these diets furnish from 1,000 to 1,500 calories daily and have been planned by persons well trained in dietetics. What attitude should physicians assume toward these diets? Shall we say that the diets are unscientific or dangerous? That would not be true. Should we state that people should never follow a reducing diet without a physician's advice? The magazines them-

Waiver-of-Dues Policy for Members in Military Service To Be Continued by State Association During 1942

THROUGH official action of The Council, the present policy of waiving or remitting annual Ohio State Medical Association dues for members in active military service will be continued for the calendar year 1942.

This action means that physicians of the following classifications will be entered on the 1942 membership roster of the Ohio State Medical Association without the payment of State Association dues:

1. Physicians who were members of the State Association in 1941 through payment of dues and who enter active military service during 1942.

2. Physicians who were members of the State Association in 1941 through waiver or remittance of State Association dues because they were in active military service during 1941 and who remain in active service during 1942 or any part of the next calendar year.

3. Physicians who completed their medical education in 1941 or will complete it in 1942, who are accepted into membership by a component county medical society in 1942 and who enter active military service in 1942.

The provision for membership through waiver or remittance of State Association dues WILL NOT apply to physicians entering military service in 1942 who were NOT members in 1941 although eligible for membership. In other words it will NOT apply to former members who permitted their membership to lapse or to those who should have been members in 1941 but who were not affiliated. Also, the provision will NOT apply to members discharged from military service between now and January 1, 1942, and who have resumed civilian practice.

Complete instructions as to how to handle the details in certifying members entitled to waiver of dues in 1942 have been transmitted to the secretary-treasurer of each component county medical society.

selves urge this. Or should the profession realize that one reason why such dietary suggestions are in demand is because patients have had difficulty in obtaining these diets from their physicians? How many physicians have neglected the importance of diet in the treatment of the patient? 'Doctor, I'm overweight. What would you suggest?' 'Oh, I'd cut down on the fats, starches and sweets.' Why shouldn't this patient welcome some real help from a magazine article? How much time is spent in the curriculum of the medical school in instructing students in the planning of diets? These recently published diets are not those of the dietary faddist. They do not contain the 'screw-ball' teachings of William Howard Hay or Benjamin Gayelord Hauser. In general, the diets are excellent. Some may not contain all the protein that they should and many still require vitamin supplements. But the only good answer that a physician can make to one of these diets is his ability to plan a better one."

There are other examples which could be cited of how the physician, if he would take the time and trouble, could keep someone else from stealing the show. Too many physicians high hat the value of the periodic physical examination. Too many physicians drive their patients to the corner drugstore for patent medicines or to the irregular practitioner by failing to realize that even a trivial ailment deserves his serious attention and that a trivial ailment is a major condition in the mind of the patient. Too many physicians are unwilling to take the time to thoroughly investigate the environmental factors which may be causing the difficulties encountered by some of their patients or to point out that elimination of such factors may solve the patient's problem. Too many physicians fail to understand that the physician can play a leading role in aiding patients to make psychological and mental readjustments.

Before he grumbles and criticizes, the physician should analyze himself and his practice for the purpose of finding out if he is doing a complete job—the kind of a job which will retain the confidence of those who are looking to him for advice and guidance.

Warns Against Taking the Pleasure Out of Eating

Our hat comes off to Jo Dahl, editorial director of *Restaurant Management*, for his timely warning to readers of his publication (presumably hotel and restaurant managers) as to why, as Dahl puts it, "hotels and restaurants should stay out of the medical business."

Here's the way Dahl leads off:

"Ever since the Nutritional Conference in Washington this Spring there has been ceaseless pressure by interests trying to get restaurants and hotels to forsake their primary business and to sell the public 'dietetics.'

"This is not a new idea. It cost a large restaurant chain organization millions of dollars. Scores of individual restaurants started with all sincerity found that it was a false basis for success. They too failed.

"It is not the function of restaurants to prescribe diets, or to decide for customers how much of any one food they should eat. It is not their function to fortify foods or to add vitamin tablets to certain meals. This is the business of highly trained doctors, dietitians and nutritionists based on the study of an individual's requirements. And no two persons who require a special diet need the same balance."

After outlining what he believes to be the function of restaurants with respect to arranging menus and providing eaters with good food, Dahl winds up with these words of wisdom:

"All specialists agree that restaurants should (and most of them do) sell clean, wholesome, flavorful, well-cooked foods in variety and let the customer and his doctor establish his diet.

"When your customers no longer eat and drink for the pleasure of it, you are on your way out of the restaurant business."

In our opinion the foregoing advice wins the gold medal. This question of diet can be overworked, you know. Important, yes; but a joke if carried to the extreme. Education in diet is one thing; commercialism another. We're for sound educational programs through which the public generally can learn of the importance of proper diet and its role in meeting many health problems of the day. But, we're not for general regimentation of those who consume food any more than we are in favor of the regimentation of those who produce it, market it, cook it, and serve it, or the physician who must occasionally tell a patient what he shouldn't eat and why.

Proposed Federal Grab Should Be Vigorously Opposed

If news dispatches from Washington are correct plans are being made to ask the Congress to enact legislation which would place the unemployment compensation systems of the various states under complete federal control.

Many who have analyzed this move have emphatically pointed out that such legislation would be contrary to the best interests of employes and employers of Ohio and of other states.

It behooves the medical profession of Ohio to add its voice of protest to any such proposal. In the first place anything which would be injurious to the employers and working people of Ohio would indirectly be injurious to the medical profession. Secondly, here is another example of an attempt to bring about greater concentration of power at Washington and to destroy another of the rapidly disappearing rights of the individual states. In the third place, it represents another step in the direction of federalized control of medical and health services for it is logical to assume that these public services would be the next state functions which some greedy federal bureau would want to take over.

Many influential groups within Ohio are preparing to battle to the finish in an effort to stop this newest of federal grabs. When the battle comes, the medical profession should be doing plenty of shooting. Ohio's representatives in Congress will want to know what their constituents think about this proposal. They should be told without any pulling of punches.

P.S. We almost forgot. There is a report trickling through from Washington that the Federal Government would like to get control of the various state Workmen's Compensation Systems. Wonder how Ohio labor and industry would like that? We're sure the medical profession wouldn't.

Some of the emergency in which we find ourselves can't be blamed on Hitler.

Open New Offices

Physicians who have recently opened new offices in Ohio include the following: Dr. H. Leighton Williams, Lima; Dr. David T. Curtis, North Baltimore; Dr. Wayne A. Yoakam, Homer; Dr. Lawrence H. Miller, Granville; Dr. F. G. Marino, Cleveland; Dr. Edward Scherger, Delphos; Dr. C. G. Harner, New Holland; Dr. P. E. Adolph, Bellevue; Dr. E. H. Artman, Chillicothe; Dr. Walter Brown, Conneaut; Dr. Hedwig D. Lang, Columbus; Dr. Donald S. McDill and Dr. John A. Funk, Coshocton; Dr. M. H. Mitchell, Kingston; Dr. William Storer, Middletown; Dr. Richard L. Morgan, Marion; Dr. C. E. Bolinger, Pleasant City; Dr. Vernon D. Stephens, Columbus.

Inclusive Hospital Rates: An Analysis

By MAC F. CAHAL, Chicago, Illinois

WHEN John Jones enters a hospital on the advice of his family doctor, he would like a definite idea of what his hospital bill is going to cost him. He may select a room at a predetermined daily cost according to his tastes and pecuniary status, but no one can tell him how long he will be in the hospital or how many extra charges he will incur before he is discharged. To provide an answer to one or both of these questions, some rather ingenious proposals have been advanced by a number of hospital executives writing in hospital publications during recent years.[1]

An "inclusive" or "flat" rate has been advocated, with enthusiastic claims for its advantages. The basic principle has as many modifications as there are plans in operation. In essence, it amounts to a limited application of the insurance principle. Insurance spreads the cost of a probable or contingent loss over a period of time and over a group of risks. Group hospitalization employs both these factors under plans providing for prepayment by subscribers to cover the cost of future hospitalization by members of the group. Inclusive rates spread the cost of probable expenses over a group, i.e., all patients hospitalized in the institution. It does not spread the cost over a period of time because no payment is made until the expense arises. To the basic rate of the room selected by John Jones is added a fixed or graduated sum to cover the cost of all extras. The patient who does not incur extra expenses helps to pay for the patient who does.

WANT MEDICAL SERVICES

The items included among these "extras" are subject to variation. If the added charge covers nothing more than actual hospital services, the system has much to recommend it. The fact is, however, that almost every one of the writers advocating the system have proposed that, in addition to the many hospital services provided, certain medical services be included in the inclusive rate charged by the hospital. Here we have a fundamental and profound departure from the accepted and approved methods of medical practice. What medical services are to be included? By what arrangement will the hospital charge and collect for the services of physicians? How will the physician be compensated? Can a hospital corporation legally and ethically sell the services of licensed physicians? What would be the ultimate effect of such a development on the status of medical practice?

It is said that some 75 to 90 per cent of the special services of a hospital are customarily included in the fixed room charge. Now, if the room rate is increased to include the remaining 10 to 25 per cent of these special hospital services, the system presents no implications for the practice of medicine. By raising the room charge a specified amount, additional charges for special drugs, sera, special nursing, special dressings, oxygen, transfusions, operating room, delivery room, et cetera, can be eliminated. But the advocates of the system have gone further. Many of them have proposed that the inclusive rate be increased to include the services of a radiologist, a pathologist, an anaesthesiologist or other medical specialists. Others have proposed that the fixed hospital charge include complete medical and surgical care.

The Author

● Mr. Cahal, executive secretary of the American College of Radiology, prepared the accompanying article for the Inter-Society Commission on Economics of that organization. Because the subject is one of vital current concern to the medical profession, individually and collectively, *The Journal* sought and obtained the author's permission to reproduce his analysis of this important question. Obviously, the question of inclusive hospital rates and its many ramifications deserves serious thought—action if necessary—on the part of physicians and medical societies.

A fixed inclusive rate to include all possible hospital services may be a wise and sound innovation in hospital accounting procedures. But, when a hospital sets up a limited insurance plan for medical services, it is exceeding its domain and creating serious complications in medical practice. This has all been extensively discussed in connection with group hospitalization plans, and the American Medical Association has, through its House of Delegates, consistently pointed out the dangers of offering medical services as a part of hospital care in hospital insurance schemes. Precisely the same objections are present when medical services are included by the hospital in its fixed charges for hospital care.

VARIOUS TYPES REVIEWED

Before discussing some of these objections and disadvantages, we should explain in more detail the various applications of the inclusive rate principle. In application, the various modifications of the principle fall within the following types:

1. So-called "middle-rate" plan: This plan was inaugurated under the aegis of the Rosenwald

Foundation at the Baker Memorial Hospital in Boston, the institution itself being an experiment in hospital economics.[2] The hospital was built under a gift for the hospitalization of patients of moderate means, between those in the charity wards of Massachusetts General Hospital and the well-to-do in the adjoining Phillips House. Thus the term "middle-rate". Under the plan, the social service department of the hospital sets the complete cost to be borne by each patient admitted, in view of the nature of his condition and his individual circumstances. The fee thus determined includes hospital accommodations, special services, and complete medical or surgical care. Staff physicians participating in the care of the patient are paid from the total sum collected on an agreed fee schedule.

The plan has not been widely copied for obvious reasons. It was introduced under the same sponsorship in Keokuk, Iowa, and abandoned after one year. Except for the fact that a third party determines the doctor's fee, it presents no particular problem in medical practice. Essentially, it entails nothing more than an agreement by staff physicians to treat patients in a designated income bracket at reduced fees, the hospital collecting the fee and turning it over to them. To this extent, it is not an "inclusive" rate plan in the sense we are discussing that system here. It provides an answer to both of the questions discussed above, predetermining the total expense to be incurred regardless of the extent of treatment or length of stay.

2. "Fixed" or "flat" rate plan: Under this plan, a patient's hospital bill is determined by the service on which he is admitted, that is to say, he or she is charged a predetermined flat sum if admitted for tonsillectomy, a different sum for a maternity case, et cetera. The plan has various modifications and has not been widely adopted. Unlike the "middle-rate" plan, the hospital does not determine nor collect fees for the services of physicians. It answers one of the questions referred to, predetermining the hospital bill regardless of the period of hospitalization. Charges for specialists' services for diagnosis and treatment or consultation are extra.

3. "Inclusive-rate" plan: Certain features of this plan may be included in either one of the first two above. Its distinguishing characteristic is in the lumping of all hospital charges into an unitemized "inclusive" rate. Some minor applications of the theory are no doubt employed in all hospitals. But only a few institutions have extended the principle to include certain medical services in the "inclusive" rate for hospitalization, which is the particular point for consideration here.

TWO BASIC FORMULAE

The general principle is usually applied under one of two basic formulae. In the first, the extras covered by the inclusive rate are added to the basic room rate under a graded plan, highest for the first day and gradually decreasing until the extra charge is eliminated. For example, to a basic room rate of $5.00 there may be added $8.50 for the first day, making a total inclusive rate of $13.50. For the second day, the rate would be $5.00 plus $5.00, or $10.00, and so on until the extra charge is dropped after the seventh or eighth day. The total added charge usually amounts to $20.00 to $35.00.

Under the second formula, a flat extra charge is added to the daily room rate, regardless of the length of stay. For example, a $1.00 or $2.00 service charge may be added, making the daily rate for a $5.00 room $6.00 or $7.00.

The patient's hospital bill includes all hospital and medical services with the exception of his attending physician's fee, but it varies according to the number of days in the hospital. Thus the "inclusive" rate plan differs from the "fixed" rate plan.

4. Another adaptation of the essential theory of all these plans is in the so-called "diagnostic rate". A fixed charge is made for "diagnosis" for a 24- or 48-hour stay in the hospital by ambulatory patients requiring extensive diagnostic procedures. For example, the patient may be admitted on the advance payment of $35.00 or $50.00 and receive, besides room and board for 24 hours, roentgen examination, laboratory tests and pathological studies, electro-cardiograph, metabolic studies, in fact every special service desired by his attending physician.

There can be no denying that under this system the hospital is competing with private physicians in their own offices. All the special medical procedures and consultative services offered in this diagnostic bargain are available in the offices of private physicians. Thus the hospital, a corporation, competes in the practice of medicine with the members of its own staff. This is an unexpected role of the hospital which owes its existence to the doctors in the community comprising its staff.

DISADVANTAGES CITED

Now, what are some of the disadvantages of a system of inclusive fees which offers medical services in the per diem charge for hospital room?

1. The first disadvantage is so compelling that others may well be superfluous. It is this: a hospital cannot, under the law, engage in the practice of medicine. When it sells the services of physicians, including the charge for these services and collecting therefor in a flat or inclusive rate, it is in fact engaged in the practice of medicine.[3]

2. Patients who clearly understand the theory of the inclusive rate will object to paying for a medical service they do not enjoy. This objection has been minimized by certain writers, but it can hardly be avoided if every patient is told exactly

what his increased room rate includes. He knows it includes "extras" and is assured that he would have to pay for them separately otherwise. But, does he know that he is paying for a roentgen consultation, the services of an anaesthesiologist, and a specialist in clinical pathology, even though he may not require their attention? If he knows that, will he be entirely pleased if his particular case requires none of these?

As an individual, this writer can answer that question for himself without hesitancy. When his daughter was born in an inclusive rate hospital last year, he objected strenuously to paying $11.00 for an $8.00 room when there was no need for most of the services to which the patient was entitled. Of course, a patient would not object if he received without extra charge a great deal of expensive diagnostic procedures for which the man across the hall was paying. But the man across the hall might object if he were paying the cost of them for somebody else.

3. Medical procedures included in the flat charge will be wastefully used. Experience has indicated that the work of the roentgen department just about doubles under a system by which hospital patients pay for these medical services whether they need them or not. This is to be expected. There is a natural tendency for both the patient and the attending physician to abuse the privilege thus purchased. The radiologist in one flat-rate hospital has made the confidential observation that free X-ray had a tendency to supplant diligent use of the stethoscope. Another has said quite frankly that a few attending men on his staff occasionally requested unnecessary roentgen examinations for the simple purpose of impressing their patients.

PERTINENT QUESTIONS

Is this good economics? Without disputing that the system will result in roentgen consultation in some cases which otherwise would go without it because the patient preferred to avoid the expense, the fact remains that, like so many attractive proposals for eliminating the financial burdens of illness, the disadvantages are likely to outweigh the advantages. It is hard to see how the cost of hospitalized illness can be reduced by making patients pay an increased amount, at least a portion of which is almost certain to go to pay for injudiciousness or downright abuse. How can the per-patient cost of roentgen examination be reduced by doubling it?

4. This inevitable increase in the amount of work performed in the medical departments of radiology and pathology, for instance, is bound to lead to the most egregious evil of all, an adulteration in the quality of professional service rendered. Unless expenses are increased at the same rate as demand—which they will not be—an examination which normally requires 30 minutes of a radiologist's time and a half dozen films will be disposed of in ten minutes with a couple of films.

5. Whether or not it is a disadvantage, from the hospital's point of view, one implication of the inclusive rate system should give the medical profession serious pause. We have already discussed the various types of inclusive plans. What is to prevent a hospital which is permitted to establish one plan including medical services from subsequently combining it with another? If it can offer hospital accommodations, plus the services of radiologists, pathologists, cardiologists, physical therapists, and anaesthesiologists for a flat rate of $10.00 per day, what is to prevent it from employing an obstetrician on a salary and offering a "middle-rate" plan with complete maternity care for a flat rate of $150.00 or $200.00?[4] It could sell surgery on the same basis. It could employ internists on a salary and render complete medical service at a per diem rate. It could, in short, enter and engage in the practice of medicine through the medium of employed physicians.

A likely result would be price competition between hospitals, consequent reduction in the size and quality of the employed staff, solicitation of patients, and inevitable adulteration in the medical services offered.

LAW AND ETHICS

6. The only practical way a hospital can include the services of physicians in the rate it charges for its rooms is to employ physicians on a salary, paying their salaries out of the gross income from room charges. We have already shown that this practice raises a question of law. Furthermore, it is contrary to the code of ethics of the medical profession.[5]

Of course, if the medical service is provided on a fee basis, the hospital merely collecting the fee for the doctor as in the "middle-rate" plan, the legal or ethical question is not raised. But if the hospital itself offers the services of consultants or diagnostic specialists in the charge it makes for its rooms, it is exceeding the domain ascribed to it in the care of the sick.

The objections of the radiologist to the inclusive rate proposal are disposed of with refreshing candour by one advocate of the system. He says, "With regard to arrangements with roentgenologists, it can probably be dismissed by saying that, where such rate plans are adopted, an occasional contract may have to be revised in detail in so far as the professional man's remuneration is concerned. But no real difficulty should be encountered if there is a spirit of tolerance, cooperation, and imagination."[6]

Imagination, indeed! It requires little imagination to recognize in this glib statement a proposal of profound importance to medicine. Shall the practice of medicine be controlled by hospitals or doctors?

Suppose the hospital-employer finds difficulty in balancing its budget. Will it cut physicians' salaries? Or,will it replace experienced men of recognized ability with younger physicians or men of less competence who are willing to take half the former man's salary? Radiologists and pathologists who have consented to work on a straight salary in a hospital have seen this very thing happen too often to regard it as a remote possibility. For the same room rate, a patient might get a $5,000 or $10,000 surgeon; that would be up to the choice of the hospital. It would determine the quality of medical service it could afford to offer in its bargain rate.

CORPORATE PRACTICE?

Already a few of the large group hospitalization plans, against the persistent objections of the organized medical profession, have included the services of certain physicians as a part of "hospital care". Suppose the "time" factor is added to the "group" factor and the insurance principle is engrafted upon the "inclusive rate" plan. Suppose then the "inclusive rate" which includes some medical service is combined with the "middle-rate" plan to provide complete medical care. Then we have a lay-managed corporation selling complete medical care on a prepayment basis through the medium of employed physicians.

That this is no idle hypothesis is indicated by a statement by C. R. Rorem in a report on the Boston "middle-rate" plan:

"Any really effective attack will not merely make it easier for the patient to pay his sickness bills after illness occurs, but will enable him to budget for them in advance."[7]

Organized medical societies are rapidly installing plans to permit patients to budget for medical care through prepayment. Hospitals are doing the same for hospital care. They should not, however, either in insurance plans or "inclusive rate" plans, be permitted to sell medical services along with their hospital facilities. It is the responsibility of county medical societies in all communities where attempts are made to extend the functions of the hospital in this manner to point out the inherent dangers by prompt and appropriate action.

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V. T. Root: "Room and Service are Important in Establishing Inclusive Rates", *Hospital Management,* Vol. 51, p. 23, June, 1941.

2. C. R. Rorem: "The Middle-Rate Plan for Hospital Patients", *Julius Rosenwald Fund Publications,* Chicago, 1931.

3. M. F. Cahal: "The Employment of Physicians by Hospitals: Some Legal Aspects", *Radiology,* Vol. 36, August, 1941, *et seq.*

4. Some hospitals are already selling complete "maternity service" and others propose the sale of "tonsillectomies".

5. ". . . . It would seem that in this time of extensive changes in hospital economics the point had arrived at which further marriages between hospitals and staff physicians that make the doctor of medicine the servant of the hospital should be stopped and a series of attempts at divorce among marriages that have already taken place should be instituted. Our accepted ethical principles are adequate at the present time and the cooperation of the Council on Medical Education and Hospitals would be of invaluable assistance. It is not an impossible task, but will need a militant local and national ethical spirit behind it and a frowning on those individuals in the profession who on personal grounds do not object to the gradual subjugation of the medical profession in the growth of hospital domination." Judicial Council of the American Medical Association, *Jl. A.M.A.,* Vol. 106, p. 1197, April 4, 1936.

6. *Hospitals,* June, 1941, p. 14.

7. C. R. Rorem: "How do Physicians and Patients Like the Middle-Rate Plan for Hospital Care?" *Julius Rosenwald Publications,* Chicago, 1932, p. 13.

Large Volume of C-3 Claims Causing Delay in Payments

The State Industrial Commission has advised that an unusually large number of letters are being received from physicians inquiring as to the present delay in payment of C-3 (medical-only) claims. The situation is that because of the enormous increase in the number of such claims being filed, without a corresponding increase in the personnel of the Commission, approximately 30,000 medical-only claims have accumulated for hearing. The processing of such claims at this time requires about 90 days from the date the claim is filed until a check is mailed to the attending physician. Inasmuch as letters of inquiry regarding individual claims further delay the procedure, the Commission has suggested that physicians take these facts into consideration before querying the Claims Department as to delay in the payment of fees in medical-only claims.

Recent Marriages

Recent marriages of Ohio physicians include the following: Miss Bette Marie Curry and 1st Lt. William G. Calland, Columbus; Miss Jessie May Ullman and Dr. Nicholas H. Holmes, Columbus; Miss Geraldine M. Zwahlen and Dr. T. L. King, Cleveland; Miss Ruth Cook and 1st Lt. John F. Shaner, Bucyrus; Miss Mitzi Martz, Springfield, and Dr. Curt Stitts, Cincinnati; Miss Betty Riggenbach, Hannibal, and 1st Lt. James J. Thomas, Alliance; Miss Margaret Dunn and Dr. Donald J. Birmingham, Youngstown; Miss Mabel King and Dr. James R. Bone, Cincinnati; Miss Linda Jacqueline Peters and Dr. Frank Cellars, Cincinnati; Miss Adeline Guthrie, Lima, and Dr. Robert Doernberg, Spencerville; Miss Hazel Hoffeld and Dr. Charles W. Hoyt, Cincinnati; Miss Elizabeth Wakefield Klinedinst, York, Pa., and Dr. Charles W. McGavran, II, Columbus; Miss Marjorie Hall and Dr. Vinton E. Siler, Cincinnati; Miss Esther Isabel Thompson, Columbus, and 1st Lt. William A. Smith, Fort Knox, Ky.

Board of Directors of Woman's Auxiliary Meets in Columbus; Annual Meeting Plans Made

A MEETING of the Board of Directors and Chairmen of Standing Committees of the Woman's Auxiliary to the Ohio State Medical Association was held at the Deshler-Wallick Hotel, Columbus, Monday, October 13, with the following present: Mrs. W. W. H. Curtiss, Dennison, president; Mrs. J. Edwin Purdy, Canton, past-president; Mrs. H. M. Clodfelter, Columbus, vice-president; Mrs. J. L. Stevens, Mansfield, secretary-treasurer; district directors—Mrs. R. B. Poling, Youngstown, Sixth District; Mrs. C. W. Kirkland, Bellaire, Seventh District; Mrs. Frank Siedenburg, Portsmouth, Ninth District; and Mrs. R. F. Fasoli, Brunswick, Eleventh District; chairmen of standing committees—Mrs. H. A. Coleman, New Philadelphia, publicity; Mrs. A. A. Brindley, Toledo, historian; Mrs. M. E. Kishman, Lorain, program; Mrs. C. I. Stafford, Oxford, Hygeia; Mrs. William A. Hoyt, Hillsboro, legislation; Mrs. Ralph W. Hoffman, Columbus, annual meeting; and Mrs. R. E. Mosiman, Seattle, Wash., president of the Woman's Auxiliary to the American Medical Association.

The resignations of Mrs. Fred C. Oldenburg, Cleveland, president-elect; Mrs. A. O. Hunt, Portsmouth, Ninth District director, and Mrs. H. M. Kendell, Second District Director, were accepted with regret. The Board approved the appointment of Mrs. Dale P. Osborn, Cincinnati, as president-elect and Mrs. Frank Siedenburg, Portsmouth, as director for the Ninth District.

The Treasurer's report showed a balance of $295.61, with all bills paid.

Mrs. Hoffman, chairman of the Committee on Annual Meeting, reported that the Annual Meeting would be held at the Deshler-Wallick Hotel, Columbus, Wednesday and Thursday, April 29-30, 1942, during the Ninety-Sixth Annual Meeting of the Ohio State Medical Association. The Board approved the following program for the meeting:

Wednesday, April 29

9:00 A.M.—Pre-convention meeting of the Board of Directors.
12:00 Noon—Luncheon, (Guest speaker).
2:00 P.M.—Business Session.
4:00-5:30 P.M.—Tea at the Governor's Mansion.
5:30-8:30 P.M.—Bridge and musicale.

Thursday, April 30

9:00 A.M.—Business session; election and installation of officers.
12:00 Noon—Luncheon, (Guest speaker).
3:00 P.M.—Tour of the F. & R. Lazarus Company, with a style show in the Lazarus auditorium.

Unless otherwise indicated, all meetings will be held at the Deshler-Wallick Hotel, where the Registration Desk will be located and educational exhibits displayed. On Tuesday afternoon there will be a conducted tour of the Columbus down-town shops for women who are not members of the Auxiliary or members coming early for the convention.

Mrs. Brindley, the historian, gave a very interesting report of activities of several counties and asked that all auxiliaries send her the name of their historian. Mrs. Kishman, chairman of the program committee, presented an outline for the use of auxiliaries in making up their programs, and emphasized that no activities should be inaugurated without the consent of the Advisory Council of the local county medical society.

At the suggestion of Mrs. Coleman, a gift was presented to Mrs. Purdy in recognition of her splendid work as president last year, and the Board decided to present a similar gift to the outgoing president each year. The presentation was made by Mrs. Clodfelter. In expressing appreciation Mrs. Purdy said that it would remind her of many pleasant memories.

During luncheon, Charles S. Nelson, executive secretary of the Ohio State Medical Association, gave a very interesting informal talk, in which he answered a number of questions and offered the facilities of the State Headquarters Office in furthering the work of the Auxiliary.

In the afternoon, the Board heard a most instructive talk by Mrs. Mosiman. She explained the activities of the various departments of the National Auxiliary and made suggestions as to how the county groups could help in carrying on the program of the Auxiliary.

Ohio Physicians Win Awards

A number of Ohio physicians won awards for exhibits at the recent meeting of the American Roentgen Ray Society in Cincinnati. The second prize, a bronze medal, went to three Cincinnati physicians, Drs. John A. Caldwell, Louis G. Herrmann and Harold G. Reineke, who presented a picture story of acute neuro-trophic disturbances in small bones of the extremities, which follow in the wake of trivial as well as serious injuries. Exhibitors who received certificates of award included: Dr. W. James Gardner and Dr. Wm. A. Nosik, Cleveland, intraspinal thorotrast; and Dr. Josef Warkany and Dr. Rose C. Nelson, Cincinnati, skeletal malformations in the offspring of rats reared on a deficient diet.

An ivory gavel with a gold medallion was presented to Dr. William M. Doughty, Cincinnati, upon his installation as president of the society.

In Memoriam

William Irenaeus Armstrong, M.D., Bellaire; Ohio Medical University, Columbus, 1904; aged 65; member of the Ohio State Medical Association and the American Medical Association; died October 20. Dr. Armstrong practiced in Bellaire for 34 years. He was previously located in Neffs and Hallsville. Active in civic affairs, Dr. Armstrong was one of Bellaire's best known residents. He was a member of the Methodist Church. Surviving are his widow, a daughter, a son, a sister and two brothers.

James Edwin Blickensderfer, M.D., Lebanon, Missouri; Barnes Medical College, St. Louis, 1896; aged 74; died October 19. Dr. Blickensderfer moved to Missouri in 1928 after having been chief medical examiner for the Pennsylvania Railroad in Cincinnati for 10 years. His widow and two sons survive.

John Milton Boyd, M.D., Washington C. H.; Starling Medical College, Columbus, 1904; aged 82; member of the Ohio State Medical Association and Fellow of the American Medical Association; died October 28. Dr. Boyd retired from active practice shortly after the close of World War I. He was one of the best students of archaeology in Ohio, and had one of the largest collections of Indian relics in the state. He presented it to the Washington C. H. High School a year ago. Dr. Boyd was a member of the Episcopal Church.

Theodore Brooks Breck, M.D., Cleveland; Western Reserve University School of Medicine, 1887; aged 79; died October 15. Dr. Breck first practiced in the iron and copper mining districts of Michigan and then went to Hudson, where he was located for three years. He had practiced in the old Glenville section of Cleveland for 35 years, and was one of the founders of Glenville Hospital. Dr. Breck was one of the charter members of Euclid Masonic Lodge. His widow, a daughter and a sister survive.

Albert Brueggeman, M.D., Cincinnati; Cincinnati College of Medicine and Surgery, 1898; aged 71; died October 19. Dr. Brueggeman practiced in Cincinnati for 43 years. His widow and a daughter survive.

Carl William Ekermeyer, M.D., New Bremen; Eclectic Medical College, Cincinnati, 1924; aged 41; member of the Ohio State Medical Association and the American Medical Association; died October 11. A native of New Bremen, Dr Ekermeyer had practiced there since his graduation, except for a short period in Greenwood, Indiana, and Montgomery. Active in the affairs of the community, he was a member of the New Bremen Civic Association and the Evangelical and Reformed Church. Surviving are his widow, a son, two sisters and a brother, Dr. Ernest W. Ekermeyer, Tallahassee, Florida.

Clarence Harmon Ellis, M.D., Phoenix, Arizona; Cleveland University of Medicine and Surgery, 1887; aged 81; died October 13. Dr. Ellis formerly resided in Whitehouse, Lucas County. He went to Arizona in 1899.

James Carson Fountain, M.D., Columbus; Starling Medical College, 1906; aged 63; former member of the Ohio State Medical Association and the American Medical Association; died November 3. A native of Perry County, Dr. Fountain practiced in Somerset for several years, and during World War I served in the Medical Corps of the U. S. Army. He had been located in Columbus for 23 years. His widow, a sister and a brother survive.

John William Haines, M.D., Croton; Starling Medical College, Columbus, 1896; aged 71; died November 4. Dr. Haines practiced in Croton for nearly 40 years, retiring two years ago because of ill health. He was a member of the Masonic Order and the Methodist Church. His widow, a daughter and a sister survive.

John George Frederick Holston, M.D., Zanesville; Jefferson Medical College, Philadelphia, 1903; aged 62; member of the Ohio State Medical Association; Fellow of the American Medical Association; member of the Radiological Society of North America; died November 2. Dr. Holston practiced in Zanesville for 37 years, and was a former president of the Muskingum County Academy of Medicine. A well-known magician, he was an active member of the International Brotherhood of Magicians. Dr. Holston was editor of the magazine of Phi Beta Pi for six years, and in 1915 was Supreme Archon of the fraternity. He was also a member of Sigma Alpha Epsilon, the Masonic Order and the Rotary Club. His widow survives.

John B. Kersey, M.D., Cincinnati; Pulte Medical College, Cincinnati, 1885; aged 77; died October 23. A practicing physician for over 50 years, Dr. Kersey first located in Lebanon, but had been practicing in Cincinnati since 1900. He was a past master of the Carthage Masonic Lodge. Surviving are his widow and two sons.

Austin Smith McKitrick, M.D., Elyria; Eclectic Medical College, Cincinnati, 1888; aged 78; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; died November 3. Dr. McKitrick moved to Elyria in 1931 from Kenton, where he had practiced 42 years. Before going to Elyria he turned over to the city of Kenton, principally as a gift, the hospital which he had founded there in 1918. Dr. McKitrick was a member of the staffs of Elyria Memorial Hospital, and Maternity and Children's Hospital, Toledo. Active in medical organizations, he had represented Hardin County in the House of Delegates of the Ohio State Medical Association, and in 1938 was president of the Lorain County Medical Society. A son and a daughter survive.

Charles Edwin Meckstroth, M.D., New Knoxville; Ohio State University College of Medicine, 1914; aged 56; member of the Ohio State Medical Association and the American Medical Association; died October 20. Dr. Meckstroth practiced in New Knoxville, of which he was a native, for 26 years. He was a member of the Evangelical Reformed Church. Surviving are his widow, a daughter, three sons, one of whom is 1st Lieutenant Paul G. Meckstroth, Ft. McClelland, Ala., and one brother, Dr. Henry L. Meckstroth, Mansfield.

Emerson Megrail, M.D., Cleveland; Western Reserve University School of Medicine, 1915; aged 51; member of the Ohio State Medical Association and the Society of American Bacteriologists; Fellow of the American Medical Association and the American Public Health Association; died October 22. Dr. Megrail was associate professor of hygiene and bacteriology of Western Reserve University School of Medicine and consulting director of the laboratories of the Cleveland health department. During World War I he served in France as a captain in the Medical Corps of the U. S. Army. Since 1926 Dr. Megrail had been a member of the Committee on Public Health of the Cleveland Academy of Medicine, and twice been secretary of the Section on Experimental Medicine. He was president-elect of Alpha Omega Alpha and a member of Sigma Psi, national honor scientific society. Dr. Megrail was a member of the Masonic Order, the Presbyterian Church and Kappa Sigma. His widow survives.

Charles Wilbur Monroe, M.D., Cincinnati; University of Cincinnati College of Medicine, 1934; aged 40; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 4. Dr. Monroe practiced in Kentucky for three years and in Cincinnati for two years. His widow, two sisters and two brothers survive.

James Vane Seids, M.D., Cleveland; Western Reserve University School of Medicine, 1920; aged 47; former member of the Ohio State Medical Association and the American Medical Association; Fellow of the American College of Surgeons; died October 13. A member of the staff of St. Luke's Hospital. Dr. Seids practiced in Cleveland for 20 years. His widow, two daughters, his parents and two brothers survive.

Henry Light Uhler, M.D., Marion; Jefferson Medical College, Philadelphia, 1883; aged 81; died November 3. Dr. Uhler practiced in Marion for 58 years. He was a member of the Masonic Order and the Presbyterian Church. Surviving are his widow, a daughter and a sister.

Morrow Beach Wilson, M.D., London; Starling Medical College, Columbus, 1895; aged 70; died October 24. Dr. Wilson practiced in London for approximately 15 years after his return from the Spanish-American War, in which he served as a major in the Medical Corps of the U. S. Army. Two sisters survive.

Roy C. Wolcott, M.D., Columbus; Pulte Medical College, Cincinnati, 1897; aged 68; former member of the Ohio State Medical Association and the American Medical Association; died November 8. A former professor of internal medicine at the Ohio State University College of Medicine, Dr. Wolcott retired two years ago because of ill health. He was a member of the Masonic Order and the Baptist Church. His widow and a daughter survive.

Toledo Academy Postgraduate Course Scheduled for Dec. 2-5

The Seventeenth Annual Postgraduate Course of The Toledo Academy of Medicine will be presented at the Academy Building, December 2-5. The daily program will be divided into two sessions—4:00 P.M. to 6:00 P.M., and 8:30 P.M. to 10:00 P.M., with a question-and-answer period following each session. The program, entitled "A Symposium on Diagnosis", follows:

Tuesday, December 2—"Diagnosis of Vitamin Deficiencies", with motion picture demonstration, Dr. Clayton G. Weigand, Clinical Research Department, Eli Lilly and Company, Indianapolis, Ind.

Wednesday, December 3 — "Gastro-Duodenal Ulcer; Etiologic, Diagnostic and Therapeutic Consideration", Dr. George B. Eusterman, Rochester, Minn., professor of medicine, University of Minnesota Medical School.

Thursday, December 4.—"Diagnosis of Diseases of the Chest", with view box and lantern demonstration, Dr. John B. Barnwell, associate professor of internal medicine, University of Michigan Medical School, Ann Arbor, Mich.

Friday, December 5—"Diseases of the Thyroid in all Clinical Aspects", Dr. James H. Means, professor of clinical medicine, Harvard University Medical School, Boston, Mass.

Activities of County Societies

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

BUTLER

The first Fall meeting of the Woman's Auxiliary of the Butler County Medical Society was held at the home of Mrs. Harry L. Burdsall, Hamilton, Tuesday afternoon, October 21. Dr. Harry Russell, Oxford, member of the faculty of Miami University, spoke on "Speech, the Most Valuable Implement of Man".

The Woman's Auxiliary sponsored a benefit bridge party, Tuesday afternoon, November 4, in the Coca Cola auditorium, Cincinnati. Guests included members of the Woman's Auxiliary to the Cincinnati Academy of Medicine. Mrs. Vernon E. Roden, Hamilton, was chairman of the committee on arrangements.—News clipping.

HAMILTON

The Academy of Medicine of Cincinnati presented the following programs during November:

November 4—"The Uses of Sulfonamides", Dr. James M. Ruegsegger, assistant professor of medicine, University of Cincinnati College of Medicine, and L. H. Schmidt, Ph.D., director of the Institute for Medical Research, Christ Hospital, Cincinnati.

November 18—Third in the Alfred Friedlander Memorial Lecture Series, under the joint auspices of the Academy and the Heart Council of Cincinnati. "The Nature and Etiology of Rheumatic Fever", Dr. Homer F. Swift, member of The Rockefeller Institute for Medical Research, New York City.—Bulletin.

Dr. Marion A. Blankenhorn, professor of medicine, University of Cincinnati College of Medicine, spoke on "Vitamins", at a meeting of the Woman's Auxiliary, Monday afternoon, October 13, at the Academy of Medicine auditorium. —News clipping.

HIGHLAND

Mrs. J. R. McBride spoke on "Army Life From the Medical Angle", at a meeting of the Woman's Auxiliary to the Highland County Medical Society, Wednesday, November 5, at the Highland House, Hillsboro. Mrs. McBride is the wife of Captain J. R. McBride, Medical Corps, U.S. Army.—Mrs. W. B. Roads, secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CLARK

Dr. Forrest C. Hunter discussed "The Newer Treatments of the Common Skin Diseases", at a meeting of the Clark County Medical Society, Thursday noon, October 9, at the Hotel Shawnee, Springfield.—News clipping.

DARKE

"Digestive Disturbances in Infancy and Early Childhood", was the subject discussed by Dr. Charles F. McKhann, professor of pediatrics, University of Michigan Medical School, and formerly professor of pediatrics at Harvard University Medical School, at a meeting of the Darke County Medical Society, Wednesday evening, October 22, at Wayne Hospital, Greenville.—W. D. Bishop, M.D., secretary.

GREENE

At a meeting of the Greene County Medical Society, Thursday, November 6, at Xenia, Dr. F. William Cox, Dayton, gave an excellent discussion of "Acute Abdominal Pain".—Donald F. Kyle, M.D., secretary.

MIAMI

Dr. S. C. Yinger, Springfield, spoke on "The Nasopharynx and Its Diseases", at a meeting of the Miami Medical Society, Friday afternoon, November 7, at the Piqua Memorial Hospital. Mr. A. J. Kiser of the Piqua Y.M.C.A. showed colored movies taken by local Y.M.CA. boys on a recent trip through the South.—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

Hon. William C. Wiseman, Judge of the Montgomery County Probate Court, spoke on "Legal Problems Concerning the Medical Profession", at a meeting of the Montgomery County Medical Society, Friday evening, November 7, at the auditorium of the Fidelity Medical Building, Dayton.

Dr. George Crile, Jr., associate member of the Cleveland Clinic, spoke on "Hyperthyroidism", at a meeting of the society, Friday evening, November 21.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: GUY E. NOBLE, M.D., ST. MARYS)

ALLEN

Nearly 100 Lima and Allen County physicians and attorneys attended a joint banquet meeting of the Allen County Academy of Medicine and the Allen County Bar Association, Thursday evening, October 30, at the Argonne Hotel, Lima. Lawrence D. Stanley, Columbus attorney, spoke on "The Medical and Legal Aspects of Malpractice and Negligence Cases".—News clipping.

CRAWFORD

The Woman's Auxiliary to the Crawford County Medical Society held a luncheon meeting Tuesday, November 4, at the Hotel Talbot, Galion. Dr. Zoa Bower, Crestline, discussed the ways in which the wife of a physician can best help her husband.—News clipping.

HARDIN

Dr. Thomas F. Ross, Columbus, spoke on "Toxemias of Pregnancy", at a meeting of the Hardin County Medical Society, Thursday evening, October 16, at Kenton.—News clipping.

MERCER

Dr. John LoCricchio, Lima, was the guest speaker at a meeting of the Mercer County Medical Society, Tuesday evening, November 4, at Celina.—News clipping.

SENECA

"Medical Service Plans", was the topic discussed by Dr. Earl E. Huffer, president of the Toledo Academy of Medicine, at a meeting of the Seneca County Medical Society, Thursday evening, November 13, at the Hotel Shawhan, Tiffin.—N. E. Williard, M.D., secretary.

Fourth District

(COUNCILOR: A. A. BRINDLEY, M.D., TOLEDO)

HENRY

Dr. Barney J. Hein, Toledo, spoke on "Some Common Problems in the Treatment of Fractures", at a dinner meeting of the Henry County Medical Society, Tuesday evening, November 11, at Napoleon.—News clipping.

LUCAS

The Toledo Academy of Medicine presented the following programs during November:

November 7—Joint Meeting with the Toledo Dental Society. "Practical Anatomy of Head and Neck as Applied to Surgery and Diagnosis", Gordon S. Maitland, M.S., D.D.S., and Haven F. Doane, M.S., D.D.S., Harper Hospital, Detroit, Mich.

November 14—Eye, Ear, Nose and Throat Section. "How the General Practitioner Can Help in the Handling of the Glaucoma Patient", Dr. Thomas D. Allen, professor of clinical ophthalmology, University of Illinois College of Medicine, Chicago.

November 28—Surgical Section. "Sigmoidoscopic Pathology", Dr. J. P. Nesselrod and Dr. Jay Garner.—Bulletin.

Mrs. Wrey Warner Barber, formerly dean of women at Bowling Green State University, spoke on "Glimpses of South America", at a luncheon meeting of the Woman's Auxiliary, Wednesday, October 29, at the Toledo Club.—News clipping.

PUTNAM

Dr. Edward B. Pedlow, Lima, was guest speaker at the November meeting of Putnam County Medical Society, held at Ottawa, November 4. His subject was "The U.S. Army Medical Corps". Dr. Pedlow reviewed the early years of the Medical Corps, beginning with the Revolution. He spoke of the deplorable lack of recognition and support given the Corps up to and including the Civil War. The necessarily crude handling of casualties and the enormous toll taken by epidemic diseases were vividly described. In a most interesting manner he traced the growth of the Corps, its contribution to scientific knowledge, and its development into the highly efficient Army component it is today.

After appointment of a nominating committee by Dr. E. Blackburn, president, the society adjourned to meet December 2.—H. N. Trumbull, M.D., correspondent for *The Journal.*

WOOD

Dr. J. V. Hartman, Findlay, spoke on "The Gall Bladder" at a dinner meeting of the Wood County Medical Society, Thursday, October 16, at the Woman's Club, Bowling Green. Dr. Hartman was successful in making his paper eminently practical, while adhering strictly to sound scientific principles. The early treatment of gall bladder diseases as carried out by the family physician was discussed in detail and means suggested whereby intelligent cooperation with the surgeon would reduce operative hazards to a great degree. A number of case histories from Dr. Hartman's files were read and cited in support of the deductions previously made. A question period closed the discussion. A rising vote of thanks was given Dr. Hartman.—D. R. Barr, M.D., correspondent for *The Journal.*

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during November:

November 7—Clinical and Pathological Section. "A Case of Hand-Schuller-Christians Disease in an Adult", Dr. Albert Loveman; "An Unusual Case of Eclampsia", Dr. Eduard Eichner and Dr. M. D. Friedman; "A Case of Addison's Disease, with Associated Primary Amenorrhea", Dr. E. H. Alder and Dr. S. B. Abrams; "A Case of Buerger's Disease, with Multiple Amputations, Onset Age 15", Dr. H. H. Pevaroff; "Carcinoma of the Uterus, Complicated by Twisted Ovarian Tumor", Dr. J. L. Bubis; "A Case of Myasthenia Gravis", Dr. S. Baumoel.

November 14—Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "Observations on the Nutrition of Clostridium Welchii", M. A. Logan, Ph.D., A.A. Tytell, Ph.D., L. E. Gilson, Ph.D., and J. T. Tamura, Ph.D.; "Vasomotor Reactions in Peripheral Circulatory Failure; 'Shock' ", (a1) "Methods of Estimating Vasomotor Reactions", (a2) "Observations on the Magnitude of the Effective Collateral Circulation", Dr. H. D. Green; (b) "Reactions to Reduction of Blood Volume. (Hemorrhage)", K. H. Radzow, A.B.; (c) "Reactions in Spontaneous Shock", R. N. Lewis, A.B.; "Determination of Tin in Tissue", Dr. J. Seifert and E. S. Rambousek, B.S.

November 19—Industrial Medicine and Orthopedic Section. "Immediate Closure of Compound Fractures", Dr. J. A. Topinka; "The Industrial Aspects of Peripheral Vascular Disturbances", Dr. E. F. Bright; "Recurrent Dislocation of the Patella", Dr W. S. Duncan; "Recurrent Dislocation of the Shoulder", Dr. T. A. Willis; "Management of Burns", Dr. A. F. Sydow.

November 26—Pediatric Section. "Poliomyelitis with Spinal Fluid Changes", Dr. Fred Beekel; "The Treatment of Skin Infections with Sulfonamides", Dr. F. M. Kriete; "Poliomyelitis and Tonsillectomies", Dr. R. P. Ostegard; "Hepato Splenomegaly", Dr. P. C. Crone; "Encephalitis (2 cases)", Dr. H. C. Epstein; "Nervous Elements in Some Common Diseases", Dr. C. W. Burhans; "Beck's Sarcoid", Dr. J. D. Pilcher; "Toxic Beuronitis", Dr. J. A. Toomey; "The Lymphoid Tissue of the Appendix in the Prodromal State of Measles", Dr. W. B. Wartman.—Bulletin.

Sixth District

(COUNCILOR: R. L. RUTLEDGE, M.D., ALLIANCE)

COLUMBIANA

Twenty-five members of the Columbiana County Medical Society heard a discussion of "Arthritis", by Dr. M. Cohen, Pittsburgh, Wednesday evening, October 14, at the American Legion Home, Lisbon. Meeting simultaneously at the Warner Tearoom were 11 members of the Woman's Auxiliary. They were addressed by Archibald Dalton, secretary of the Columbiana County Public Health League.—News clipping.

MAHONING

Dr. Claude S. Beck, professor of neurosurgery, Western Reserve University School of Medicine, Cleveland, spoke on "Heart Diseases Treated by Operation", at a meeting of the Mahoning County Medical Society, Tuesday evening, November 18, at the Youngstown Club.—Bulletin.

Mrs. F. F. Piercy gave a book review at a meeting of the Woman's Auxiliary, Monday, November 17, at St. Elizabeth's Hospital.—News clipping.

PORTAGE

Dr. Walter A. Hoyt, Akron, spoke on "Sulfa Drugs in Traumatic and Orthopedic Surgery", at a meeting of the Portage County Medical Society, at Robinson Memorial Hospital, Ravenna, Thursday, November 6.—Emily J. Widdecombe, M.D., secretary.

STARK

"Coronary Disease—Recent Studies", was the subject presented by Dr. Harold D. Green, assistant professor of physiology, Western Reserve University School of Medicine, Cleveland, at a meeting of the Stark County Medical Society, Thursday evening, November 13, at the Elks Club, Canton.—Clair B. King, M.D., secretary.

SUMMIT

"Fever of Obscure Origin", was the subject discussed by Dr. Walter M. Simpson, Dayton, at a meeting of the Summit County Medical Society, Tuesday evening, November 4, at the Mayflower Hotel, Akron.—Bulletin.

Mrs. J. E. Purdy, Canton, past-president of the Woman's Auxiliary to the Ohio State Medical Association, was guest speaker at a meeting of the Woman's Auxiliary to the Summit County Medical Society, Tuesday, October 7, at the Akron City Club.—News clipping.

TRUMBULL

Dr. D. M. Glover and Dr. A. F. Sydow, Cleveland, spoke on "The Early and Late Treatment of Burns," at a meeting of the Trumbull County Medical Society, Thursday night, October 16, at the Hotel Warner, Warren.—News clipping.

Mrs. R. E. Westbrook, Warren, was installed as president of the Woman's Auxiliary to the Trumbull County Medical Society, at a luncheon meeting at the Colonial Inn, Kinsman, Tuesday, October 14. Mrs. W. G. Drown, Warren, the retiring president, was in charge of the installation ceremonies. Other officers are: Mrs. Joseph A. Ralston, Warren, president-elect; Mrs. E. L. MacDougall, Niles, vice-president; Mrs. Frank LaCamera, Warren, secretary, and Mrs. R. B. Dobbins, Warren, treasurer. Following the business meeting, Mrs. E. O. Trescott, Girard, reviewed Pearl S. Buck's book, "Is This My Country?"—News clipping.

Eighth District

(COUNCILOR: GEORGE F. SWAN, M.D., CAMBRIDGE)

MORGAN

Dr. Daniel G. Caudy, Zanesville, was guest speaker at a meeting of the Morgan County Medical Society, Thursday evening, October 16, at the Kennebec Hotel, McConnelsville.—News clipping.

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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MUSKINGUM

At a joint meeting of the Muskingum County Academy of Medicine and the Muskingum County Dental Society, Thursday evening, November 6, at the University Club, Zanesville, Dr. Claire LeRoy Straith, Detroit, spoke on "Oral and Plastic Surgery."—Beatrice T. Hagen, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

SCIOTO

Dr. C. C. Sherburne, Columbus, spoke on "Treatment of Luetic Heart Disease", at a meeting of the Hempstead Academy of Medicine, Monday evening, November 10, at the Portsmouth General Hospital.—Sol Asch, M. D., secretary.

The following officers of the Woman's Auxiliary were re-elected at a meeting Wednesday afternoon, October 8: Mrs. S. L. Meltzer, president; Mrs. Oscar R. Micklethwait, vice-president; Mrs. Franklin C. Beeks, secretary; Mrs. Frank Siedenburg, treasurer, and Mrs. A. P. Hunt and Mrs. Carl G. Braunlin, members of the Board of Directors.—News clipping.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

The Columbus Academy of Medicine presented the following programs during November:

November 3—"Newer Trends in Medical Education", Dr. Hardy A. Kemp, Dean of the Ohio State University College of Medicine.

November 17—"Observations on Public Health and Hygiene in England at War", Dr. N. Paul Hudson, professor of bacteriology, Ohio State University College of Medicine.

November 24—Section in General Medicine. Meeting at White Cross Hospital. "Case History Night", Dr. Louis Mark and staff.—Bulletin.

Mrs. Jack Nida spoke on the Red Cross volunteer service at a meeting of the Woman's Auxiliary, Monday evening, November 17, at the Columbus Gallery of Fine Arts. Mrs. R. S. Fidler was chairman of hostesses for the evening.—News clipping.

MADISON

Dr. W. P. Smith, Columbus, was guest speaker at a meeting of the Madison County Medical Society, Thursday evening, October 23, at the home of Dr. J. A. Knapp, London.—News clipping.

Eleventh District

(COUNCILOR: S. V. BURLEY, M.D., LORAIN)

ASHLAND

A dinner meeting of the Woman's Auxiliary to the Ashland County Medical Society was held at Ashland, Friday evening, October 17, with Mrs. M. D. Shilling in charge of arrangements. Plans were made to assist the county society in entertaining the regional postgraduate meeting at the Ashland Country Club, November 7.—News clipping.

LORAIN

Matters concerning the control of tuberculosis in the county were discussed at a special called meeting of the Lorain County Medical Society, Tuesday evening, October 28, at the Lorain Country Club.

Dr. Herbert B. Wright, Cleveland, spoke on "Aviation and the Medical Problems Involved", at a dinner meeting of the society, Tuesday, Novem-

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ber 11, at the Elk's Restaurant, Elyria.—L. H. Trufant, M. D., secretary.

MEDINA

Dr. Frederick Kornfeld, Medina, addressed the Medina County Medical Society, Thursday, October 23, at Medina on the subject, "The Practice of Medicine in Europe as Compared With the United States."—News clipping.

Members of the Woman's Auxiliary discussed aid for hospitals in the county at a meeting in Seville, Tuesday afternoon, November 18.—News clipping.

RICHLAND

Dr. Wm. James Gardner, Cleveland, spoke on "Protrusion of the Intervertebral Disc as a Cause of Sciatic and Back Pains", at a meeting of the Richland County Medical Society, Thursday afternoon, October 23, at the Mansfield General Hospital. Moving pictures and lantern slides demonstrated the cause and treatment of this condition. The meeting was well-attended and a lively discussion in charge of Dr. Henry T. Stiles ensued. Arrangements for the meeting were made by Dr. David R. Talbot.

Meetings of the Woman's Auxiliary were held at the home of Mrs. J. L. Stevens on October 6, and at the home of Mrs. Charles Keller on November 3.—News clipping.

Coming Meetings

Ohio State Medical Association, Columbus, April 28-30, 1942.

American Medical Association, Atlantic City, June 8-12, 1942.

American Academy of Orthopedic Surgeons, Atlantic City, N. J., Jan. 11-15, 1942.

American College of Physicians, St. Paul, April 20-24, 1942.

Fourth Annual Forum on Allergy, Detroit, Jan. 10-11, 1942.

National Society for the Prevention of Blindness, New York City, Dec. 4-6.

Radiological Society of North America, San Francisco, Dec. 1-5.

Society for the Study of Asthma and Allied Conditions, New York, Dec. 6.

Southern Surgical Association, Pinehurst, N. C., Dec. 9-11.

Society of American Bacteriologists, Baltimore, Dec. 29-31.

Western Surgical Association, St. Paul, Dec. 5-6.

Ordered Into Active Service

Additional Ohio physicians called to active military service during the past month were: Camp Perry, Ohio (Corps Area Service Command, Reception Center): 1st Lt. Aaron Paley, Cleveland. Appointed acting assistant surgeon in the U. S. Navy: Lt. E. Richard King, West Liberty, Ohio.

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GYNECOLOGY—Two Weeks Intensive Course will be offered four times during the year 1942, dates to be announced. Clinical and Diagnostic Courses every week.

OBSTETRICS—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Clinical and Special Courses starting every week.

OPHTHALMOLOGY—Two Weeks Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

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Annual Sale of Christmas Seals Is Started in Ohio

The 35th annual sale of Christmas Seals in Ohio began on November 24, and will continue through Christmas Day, under the sponsorship of the Ohio Public Health Association, and affiliate of the National Tuberculosis Association. Proceeds of the sale are to be used for the continuation of the educational campaign against tuberculosis.

CHRISTMAS SEALS

Protect Your Home from Tuberculosis

Sale of the seals will be conducted by over 100 local organizations in communities throughout the state. Eighty per cent of the receipts are retained by the local organizations, with 15 per cent going to the Ohio Public Health Association and 5 per cent to the National Tuberculosis Association. Receipts in Ohio last year were $371,032.47, compared with $312,652.91 in 1939 and $277,116.07 in 1938. The goal for the 1941 campaign is $434,000.

"Steven Dohanos, a native of Lorain, in designing the 1941 Christmas Health Seal, conceived the lighthouse as the symbol of tuberculosis work, spreading light, leading the way to safety," stated Dr. Kennon Dunham, Cincinnati, president of the Ohio Public Health Association, when he disclosed the theme of this year's Seal.

Dr. Goldblatt and Associates Win Hypertension Paper Award

A paper dealing with vascular hypertension written by Dr. Harry Goldblatt, Dr. Harry Weinstein and Dr. Joseph R. Kahn of the Institute of Pathology of Western Reserve University has won the Van Patten first prize award of $1,000 as the "most important contribution to the subject of hypertension published during the first six months of this year". Published in the March, 1941, issue of *The Journal of Experimental Medicine*, the paper was entitled, "Studies on Experimental Hypertension; Effect of Intermittent Renal Arterial Occlusion on Blood Pressure of Dog", and was the result of experimentation made possible by the University's Beaumont-Richman-Kohn Research Fund.

The winning paper was selected for first prize from 102 published papers on hypertension by votes cast by physicians from all over the country. The contest was originated by the Van Patten Pharmaceutical Company, Chicago, which also provided prize awards totaling $1,500.

Dr. Goldblatt is associate director of the Institute of Pathology and professor of experimental medicine at Western Reserve University School of Medicine. Dr. Weinstein is associate and experimental pathologist and Dr. Kahn is first assistant in experimental pathology and instructor in pathology. They have turned over the prize money to the University so that it may be added to the Beaumont-Richman-Kohn Fund.

Kelleys Island Needs a Physician

The village of Kelleys Island, located in Lake Erie, four miles from the nearest mainland, needs a physician. According to Lynn O. Brown, the village clerk, "this vacancy offers a fine opportunity for any doctor who is working too hard and wishes to ease up". In addition to the prospect of income from private practice, inducements include a modern ten-room house, seven rooms for dwelling and three for office, provided rent-free, and a monthly subsidy provided by the village and Erie County. This subsidy is permitted by a special enactment of the state legislature. During navigation, daily boat service is available from Sandusky and taxi boat service from Lakeside, and daily mail and passenger service is provided by airplane during the entire year. Further information can be obtained by addressing Lynn O. Brown, Village Clerk, Kelleys Island, Ohio.

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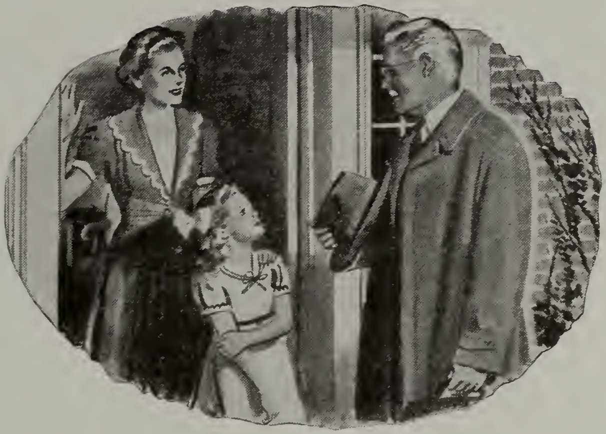

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(1)
1936. Mass. Agr. Expt. Sta. Bull. No. 338.
1937. Chemistry of Food and Nutrition, Fifth Edition, H. C. Sherman, MacMillan, N. Y.
1938. Nutrition Abstracts and Reviews 8, 281.
1939. Food and Life Yearbook of Agriculture, U. S. Dept. Agr., U. S. Government Printing Office, Washington, D. C.

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Recent U. S. government reports indicate a considerable increase in cigarette smoking. As physicians realize, this is a natural development during times of public tension.

This situation, and the advent of recent and very significant research, have greatly increased the interest of the profession in the subject of cigarette smoking.

Naturally, situations arise in which a physician may find it desirable to modify his patients' smoking hygiene. But in any case, the physician is concerned about the smoke itself, the principal carrier of physiologically reactive substances.

Scientific authorities in general agree that the constituent of cigarette smoke with the greatest physiologic significance is nicotine. Any reduction of this substance in a patient's smoking is considered desirable by most physicians.

When the modification of a patient's smoking is indicated, here are facts which should be of interest to you:

The makers of Camel cigarettes arranged for independent tests on 5 of the largest-selling brands of cigarettes. The rate of burning

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CIGARETTE SMOKING?

and the nicotine content of the smoke of Camels were compared to the averages of the other brands tested.

The results paralleled the findings of prominent medical–scientific authorities.* Here is the most important conclusion:

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This research also suggests that by advising patients to smoke slower-burning Camels, it is possible to reduce the nicotine content of cigarette smoke *without sacrifice of smoking pleasure.* Thus, the patient's cooperation is assured.

A RECENT ARTICLE by a well-known physician in a leading national medical journal** presents new and important information on this subject, together with other data on the significance of the burning rate of cigarettes. There is a comprehensive bibliography. Let us send you this impressive article for your own inspection. Write to Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

*J.A.M.A., Vol. 93, No. 15, p. 1110, Oct. 12, 1929
Bruckner, Die Biochemie Tabaks, 1936
**The Military Surgeon, Vol. 89, No. 1, p. 7, July, 1941

Annual Secretaries Conference Held in Chicago. Nov. 14-15

The annual conference of secretaries of state medical associations and editors of state medical journals was held in the Headquarters Office of the American Medical Association, Chicago, on November 14 and 15. The program, which was one of the best in the history of the conference, was devoted principally to military medical preparedness and medical service plans. One of the outstanding addresses, "The Role of the Medical Profession in the Selective Service System", by Brigadier General Lewis B. Hershey, Director of the Selective Service System, is published in full in this issue of *The Journal.* Other talks included: "The United States Army and Medical Preparedness", L. B. McAfee, assistant surgeon general of the United States Army; "The Federal Security Agency and Medical Preparedness", Watson Miller, assistant administrator, Federal Security Agency; "Social Security Problems in Illinois", Dr. Charles H. Phifer, President, Illinois State Medical Society; "Principles Involved in Medical Service and Group Hospitalization Plans", Dr. Stanley B. Weld, editor-in-chief, Connecticut State Medical Journal; and Dr. Peter Irving, secretary of the Medical Society of the State of New York; "Industrial Health: Progress and Prospects", Dr. C. M. Peterson, secretary, Council on Industrial Health, American Medical Association; "How Can the State Medical Journals Best Serve Organized Medicine?", Dr. Wingate M. Johnson, editor, North Carolina Medical Journal; "The Responsibilities of the Editorial Staff of a State Medical Journal", Dr. Robert N. Nye, editor, New England Medical Journal; "Medical Aspects of Civilian Defense", Dr. George Baehr, chief medical officer, Office of Civilian Defense.

The Ohio State Medical Association was represented at the conference by Dr. Jonathan Forman, editor of *The Journal*; Charles S. Nelson, executive secretary; George H. Saville, assistant executive secretary, and Richard A. Aszling, director, Bureau of Public Education.

Government In Need of Physicians; Various Openings Listed

Two recent announcements by the United States Civil Service Commission reveal the need for medical personnel in various branches of the Federal Government.

Competitive examinations are to be held for senior medical officer, $4,600 per year; medical officer, $3,800 per year and associate medical officer, $3,200 per year, appointments to be made in the following Federal agencies: Public Health Service; Food and Drug Administration; Veterans' Administration; Civil Aeronautics Administration, and the Indian Service. Approximately 200 appointments to the position of associate medical officer will be made by the Veterans' Administration.

Because of the special need for medical officers in the above branches, modifications have been made in the qualifications of applicants desiring to take the examinations. These changes include: Setting back of the date of graduation for the grade of associate medical officer to May 1, 1930; provision for the acceptance of applications for the associate grade from physicians who have not yet completed internship; and the raising of the age limit for all grades to 53.

Further information and application forms may be obtained from the Commission's representative at any first- or second-class post office or from the central office in Washington, D. C.

Columbus—Dr. B. F. Barney discussed "Signs, Symptoms and the Treatment of Cancer," at a meeting of the Optimist Club.

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Physicians who have recently completed their internships, or physicians, with experience, desiring to change locations are requested to file their names with the State Headquarters Office, Ohio State Medical Association, 1005 Hartman Theater Building, Columbus, Ohio.

Frequently, the Headquarters Office receives inquiries from physicians seeking assistants, partners, or men qualified for positions on private hospital staffs.

If physicians seeking new opportunities or desiring to change locations will file their names with that office, an effort will be made to furnish them with suggestions and at the same time render a service to members seeking assistants, etc.

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The Physician's Bookshelf

Colwell's Daily Log for Physicians, a brief, simple, accurate financial record for the physician's desk. (Standard log for average practice, $6.00; double log for large practices, $11.00 *Colwell Publishing Co., Champaign, Ill.)* This system of keeping office accounts continues to be the best for the physician's office. In addition to the pages for the usual daily entries of office calls and other work, there are several other excellent features. The best of these is the group of summary pages for the end of the month where each item of professional expense can be recapitulated. This makes income tax reports extremely easy. Those of us who never have had a business training can acquire much useful information from the instruction pages included in each set.

Wounds and Fractures, by H. Winnett Orr, M.D. ($5.00, *Thomas, Springfield, Illinois),* is a clinical guide to civil and military practice with special reference to the Orr technique in the treatment of cases of osteomyelitis and compound fracture. This makes it an extremely valuable book to both the civilian and the military surgeon.

Oh Doctor! The book with a bedside manner, by Betty Bacon Blunt ($1.50, *Stephen Daye Press, Brattleboro, Vermont),* is of a series of lively sketches setting forth the hospital experience of the heroine. A book which would be much appreciated by the patient convalescing from a recent operation.

William Henry Welch and the Heroic Age of American Medicine, by Simon Flexner and James Thomas Flexner ($3.75, *Viking Press, New York City),* is a most entertaining life of the Dean of American Medicine. Incidentally, it gives us an excellent picture of the great developments in bacteriology, pathology, and medical education in America. Every physician should put this volume on his "must" list for his winter reading.

Susie Stewart, M.D., by Caroline A. Chandler ($2.00, *Dodd, Mead and Company, New York),* is a story of a young woman doctor by a woman instructor in preventive medicine at the Johns Hopkins University. We take the "henmedic" through her medical course and her internship and into the hospital ward. While it is definitely a career book it is a good story and one you will enjoy reading. It will make a nice gift to the young woman who is thinking of studying medicine.

Pills and Proverbs, by Charles H. McCollum ($2.00, *Meador Publishing Co., New York, Boston),* is a true story enriched by a homespun philosophy which follows the writer through half of the United States and ten European countries. The author has been a school teacher, a

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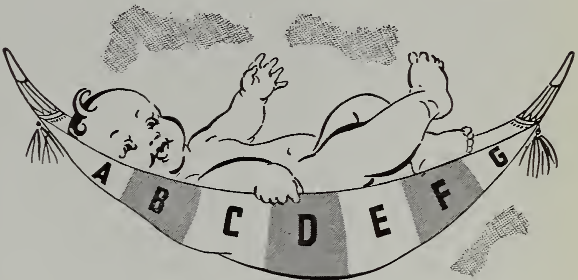

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pharmacist, medical student, soldier, country doctor, surgeon, professor in a medical school. The life of this Texas surgeon makes fast reading with never a dull moment.

The 1941 Yearbook of Public Health, edited by J. C. Geiger *(Year Book Publishers, Chicago)*, makes its second appearance maintaining the high standard of all yearbooks and giving a resumè of the outstanding papers in the field. The notes of the editor make about the best available commentary on contemporary public health thought.

Synopsis of the Preparation and After-Care of Surgical Patients, by H. C. Ilgenfritz, M.D., and R. M. Peck, M.D. ($5.00, *C. V. Mosby Company, St. Louis)*, is a practical guide to the care of surgical patients throughout their hospital stay. These New Orleans surgeons have done a splendid job in the preparation of this volume. This book certainly deserves a place in the interne library of every hospital.

New and Unofficial Remedies, 1941 ($1.50. *American Medical Association, Chicago)*, presents again indispensable information on the work of the Council on Pharmacy and Chemistry.

The Essentials of Occupational Diseases, by J. V. Reed, M.D., and A. K. Harcourt, M.D., ($4.50, *Thomas, Springfield, Illinois)*, is an opportune, concise, and well documented work based upon the 30 years' experience of these Indianapolis physicians in the practice of industrial medicine and surgery. It treats of all occupational diseases on record in the United States. In addition to physicians and health officers, it can be recommended to liability insurance executives, industrial and labor groups.

One Thousand Questions and Answers About T. B., edited by Fred H. Heise, M.D. ($1.00. *National Tuberculosis Association, New York City)*, represents a careful selection from the question box department of *The Journal of Outdoor Life* which the director of the Trudeau Sanatarium patiently conducted for over 20 years. The questions represent, therefore, the ones for which the patient and his friends are continually seeking the answers. It deserves a place in the waiting room of every physician.

Health Resorts of the USSR, edited by I. A. Pertsov, M.D. *(The USSR Society of Cultural Relations With Foreign Countries)*, is an attractively illustrated book setting forth the advantages of the various spas. A good deal of space is devoted to proving the educational qualifications of the physicians in charge and to explaining how these health resorts fit into the Soviet constitutional declaration that the citizens of the USSR have the right to rest and leisure. (Article 119.) In recent days one doubts whether there is a resting place or a health resort west of the Urals.

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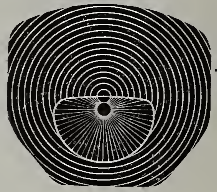

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**Facts from: Proc. Soc. Exp. Biol. & Med., 1934, 32, 241-245; N. Y. State Jrl. of Med. Vol. 35, No. 11,590; Arch. of Otolaryngology, Mar. 1936, Vol. 23, No. 3,306.*

Buckeye News Notes

Alliance—Major George L. King has been transferred from Ft. Meade, Md., to Washington, D. C., where he is now chief of the eye, ear, nose and throat service at the General Dispensary of the U. S. Army.

Ashtabula—Dr. T. F. O'Connor, who has been on duty as a major in the Medical Corps of the U. S. Army at Atlanta, Ga., has returned to private practice.

Chillicothe—Dr. Jonathan Forman, Columbus, physician-member of the Ohio State Committee of Nutrition for Defense, was guest speaker at a meeting of the Kiwanis Club.

Cincinnati—At a meeting of the Cincinnati Society of Neurology and Psychiatry, November 11, at the University Club, Drs. I. Arthur Mirsky, Samuel Elgart and Charles D. Aring discussed "Sonogenic Convulsions (Acoustic-motor Fits in Rats)."

Columbus—Dr. Hardy A. Kemp, Dean of the Ohio State University College of Medicine, was guest speaker at a meeting of the Women's Medical Society.

Dayton—The Eleventh Annual Sunday Lecture Series at the Public Library Museum was opened by Dr. Walter M. Simpson with an address and colored movies on "The Maya People of Central America."

Defiance—"The Sulfonamides," was the topic of a talk made by Dr. J. D. Cameron at a meeting of the Lions Club

Findlay—"Milestones in Modern Medicine," was the subject of an address made by Dr. O. P. Klotz at a meeting of the Up-to-Date Club.

Greenville—Dr. Charles F. Frankman was seriously injured in an automobile accident on October 28.

McConnelsville—Dr. Clarence E. Northrup, on active duty in the Medical Corps of the U. S. Army, has been promoted from the rank of first lieutenant to captain.

Marion—Dr. Frederick W. Rea, Dr. S. E. Morrison and Dr. Carl W. Sawyer were guest speakers at a meeting of District 7 of the Ohio State Nurses' Association.

Piqua—The Covington P.-T.A. was addressed by Dr. John T. Quirk on "Rheumatic Heart Disease in Younger Adults."

Springfield—Dr. Arthur R. Cohen, formerly a first lieutenant in the Medical Corps of the U. S. Army, stationed at Camp Forrest, Tenn., has returned to private practice.

Toledo—Dr. E. J. McCormick, President-Elect of the Ohio State Medical Association and Past-Grand-Exalted Ruler of the B.P.O.E., was the principal speaker at a National Defense meeting of the Cleveland Lodge of Elks.

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